


```
DDDDDDDD SSSSSSSS RRRRRRRR LL I I I I I 88888888
DDDDDDDD SSSSSSSS RRRRRRRR LL I I I I I 88888888
DD DD SS RR RR LL I I 88 88
DD DD SS RR RR LL I I 88 88
DD DD SS RR RR LL I I 88 88
DD DD SSSSSS RRRRRRRR LL I I 88888888
DD DD SSSSSS RRRRRRRR LL I I 88888888
DD DD SS RR RR LL I I 88 88
DD DD SS RR RR LL I I 88 88
DD DD SS RR RR LL I I 88 88
DD DD SSSSSS RRR RR LL I I I I I 88888888
DDDDDDDD SSSSSSSS RR RR LLLLLLLLLL I I I I I 88888888
DDDDDDDD SSSSSSSS RR RR LLLLLLLLLL I I I I I 88888888
.....
.....
.....
.....
```

```
LL I I I I I SSSSSSSS
LL I I I I I SSSSSSSS
LL I I SS
LL I I SS
LL I I SS
LL I I SSSSSS
LL I I SSSSSS
LL I I SS
LL I I SS
LL I I SS
LL I I SS
LLLLLLLLLL I I I I I SSSSSSSS
LLLLLLLLLL I I I I I SSSSSSSS
```

Version: 'V04-000'

```
*****
*
*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
*  ALL RIGHTS RESERVED.
*
*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
*  ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
*  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
*  TRANSFERRED.
*
*  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
*  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
*  CORPORATION.
*
*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*
*****
```

++
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

DSRLIB.REQ requires in almost all Require files used by DSR and DSRPLUS.
It is used to build both DSRLIB.L-- and DPLLIB.L--, which are used (via
a conditionalized LIBRARY statement) by almost all modules in the DSR /
DSRPLUS code.

The remaining REQUIRE statements in the code occur in RNFERM.BLI, which
requires MSGTXT.REQ, and in LP1.BLI, which requires RUNTAB.REQ.

ENVIRONMENT: Transportable BLISS

AUTHOR: Keith Dawson CREATION DATE: March 1983

MODIFIED BY:

008	REM00008	Ray Marshall	4-June-1984
	Added a SWITCHES declaration to cause the expansion of the .REQ files.		
007	KAD00007	Keith Dawson	9-May-1983
	Remove support for .DX, .PX.		
006	KAD00006	Keith Dawson	13-Apr-1983
	Added conditionals on CREFDS, GTOKCC, KEYWORD.		
005	KAD00005	Keith Dawson	7-Apr-1983
	Added require files GTOKCC, KWTDEF (omitted by accident)		

0058 0
0059 0
0060 0
0061 0
0062 0
0063 0
0064 0
0065 0
0066 0
0067 0
0068 0
0069 0

004 KAD00004 Keith Dawson 6-Apr-1983
Added require files for cross-referencing (KEYWORD, CREFDS),
final-output modifications (PASS).
003 RER00003 Ron Randall 04-Apr-1983
For DSRPLUS: Added topnote require files (TNREC, TOPNOT).
002 KAD00002 Keith Dawson 17-Mar-1983
Conditionalized 6 DSRPLUS-only Require files on the DSRPLUS
variant.


```

: 0070 0 LIBRARY 'NXPORT:XPORT';
: 0071 0
U 0072 0 %IF (%VARIANT/2) %THEN
U 0073 0 LIBRARY 'REQ:RNODEFDPL'; ! Define /VARIANT macros
: 0074 0 %ELSE
: 0075 0 LIBRARY 'REQ:RNODEFDSR'; ! Define /VARIANT macros
: 0076 0 %FI
: 0077 0
: 0078 0 SWITCHES LIST (REQUIRE); ! This declaration causes the remaining files
: 0079 0 ! to be expanded in the listing
: 0080 0
: 0081 0 ! The following files are used by some of the Require files to come.
: 0082 0
: 0083 0 REQUIRE 'REQ:MAXIMA.REQ'; ! Maximum values on some DSR / DSRPLUS parameters.

```

H 14
15-Sep-1984 23:07:40
15-Sep-1984 22:53:05

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]MAXIMA.REQ;1 Page 4
(1)

Version: 'V04-000'

*
* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
* DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
* ALL RIGHTS RESERVED.
*

* THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
* ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
* INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
* COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
* OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
* TRANSFERRED.
*

* THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
* AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
* CORPORATION.
*

* DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
* SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*

++
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
Maximum values of DSR / DSRPLUS parameters, including the
maximum allowed ranges on numbers.

ENVIRONMENT: Transportable BLISS

AUTHOR: Keith Dawson

CREATION DATE: March 1983

MODIFIED BY:

002 KAL00002 Keith Dawson 21-Mar-1983
Move xp_string_size from KWXYP.REQ to MAXIMA.REQ.

--
LITERAL

max_levels = 6,	Maximum...
max_page_ranges = 5,	header-level depth.
max_require = 10,	number of /PAGE RANGE specifications.
max_save_depth = 20,	depth of .REQUIRE commands.
max_tabs = 40,	number of simultaneous .SAVE commands.
max_title = 450,	number of tab stops.
max_vr_length = 15,	internal length of titles and subtitles.
max_vr_names = 20;	length of a variable name.
	number of variables.

```

R0141 0 LITERAL
R0142 0 xp_string_size = 50; !Maximum length of SORT= or APPEND= strings.
R0143 0
R0144 0 MACRO
MR0145 0 most_positive = !Biggest positive number that can be represented.
MR0146 0 ABS (most_negative + 1)
R0147 0 %,
R0148 0
MR0149 0 most_negative = !Most negative number that can be represented.
MR0150 0 %BLISS16(%X'8000') %BLISS32(%X'80000000') %BLISS36(%X'400000000000')
R0151 0 %,
R0152 0
MR0153 0 most_digits = !Maximum number of digits in a number.
MR0154 0 %BLISS16(5) %BLISS32(10) %BLISS36(11)
R0155 0 %,
R0156 0
MR0157 0 most_digits_9 = !Maximum number of digits in a number of the form 99...
MR0158 0 (most_digits - 1)
R0159 0 %;
R0160 0
R0161 0 !

```

: 0162 0 REQUIRE 'REQ:BPOSIT.REQ'; ! Macro to return the bit position part of a field definition.

K 14
15-Sep-1984 23:07:40
15-Sep-1984 22:49:44

VAX-11 Bliss-32 V4.0-742
_S255\$DUA28:[RUNOFF.SRC]BPOSIT.REQ;1 Page 7
(1)

Version: 'V04-000'

```
*****
*
*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
*  ALL RIGHTS RESERVED.
*
*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
*  ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
*  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
*  TRANSFERRED.
*
*  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
*  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
*  CORPORATION.
*
*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*
*****
```

```
++
FACILITY:      DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
    Defines a macro to return the bit position part of a field definition.
    It is intended to be used with the fields defined in LSTBTS, but is
    generally applicable.

ENVIRONMENT:   Transportable BLISS

AUTHOR:       Rich Friday

CREATION DATE: 1978

MODIFIED BY:
    004      KAD00004      Keith Dawson      07-Mar-1983
             Global edit of all modules. Updated module names, idents,
             copyright dates. Changed require files to BLISS library.
```

```
--
MACRO
    BPOSIT (S, C, X) = S%;
```

End of BPOSIT.REQ

L 14
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 8
(2)

: 0216 0 REQUIRE 'REQ:CLIST.REQ'; ! CL_... (counted list) items

Version: 'V04-000'

```

*****
*
*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
*  ALL RIGHTS RESERVED.
*
*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
*  ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
*  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
*  TRANSFERRED.
*
*  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
*  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
*  CORPORATION.
*
*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*
*****

```

```

++
FACILITY:      DSR (Digital Standard RUNOFF) / DSRPLUS
ABSTRACT:
  Definitions for counted lists. A counted list carries with it
  its own description: current size, first and next character
  positions, and maximum size.
ENVIRONMENT:   Transportable BLISS
AUTHOR:        Rich Friday
CREATION DATE: 1978
MODIFIED BY:
  003      KAD00003      Keith Dawson      07-Mar-1983
           Global edit of all modules. Updated module names, idents,
           copyright dates. Changed require files to BLISS library.
--

```

LITERAL
 CL_DEFAULT_SIZE = 15;

```

STRUCTURE
  COUNTED_LIST[I;N=CL_DEFAULT_SIZE] =
    [%UPVAL*(N + 2)]      ! First two elements for control information
    (COUNTED_LIST + (1 + I)*%UPVAL);

```

N 14
15-Sep-1984 23:07:40
15-Sep-1984 22:50:09

VAX-11 Bliss-32 V4.0-742
_S255\$DUA28:[RUNOFF.SRC]CLIST.REQ;1 Page 10
(1)

```
: R0274 0
: R0275 0 LITERAL
: R0276 0 CL_MAX_INDEX = -1, ! Maximum allowable 'I' saved at start.
: R0277 0 CL_INDEX = 0; ! Current 'I'
: R0278 0
: R0279 0 !
End of CLIST.REQ
```


B 15
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 11
(2)

; 0280 0 REQUIRE 'REQ:LSTBTS.REQ'; ! BAR__, CND__, ISQ__, & RIT__

Version: 'V04-000'

```
*****
*
*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
*  ALL RIGHTS RESERVED.
*
*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
*  ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
*  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
*  TRANSFERRED.
*
*  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
*  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
*  CORPORATION.
*
*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*****
```

++
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
Defines BAR__, CND__, ISQ__, OSQ__, & RIT__.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

005 REM00005 Ray Marshall 16-May-1984
Added OSQ__ to support outputting of the output line number.

004 KAD00004 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.

--
MACRO
BAR__ = 0,1 ! TRUE if user said:
CND__ = 1,1 ! /DEBUG:CONDITIONALS
ISQ__ = 2,1 ! /SEQUENCE

VAX-11 Bliss-32 V4.0-742 Page 13
_S255\$DUA28:[RUNOFF.SRC]LSTBTS.REQ;1 (1)

```

: MR0338 0
: R0339 0
: MR0340 0
: R0341 0

```

```
RIT-8,      = 3,1    ! /RIGHT
OSQ-8:      = 4,1    ! /DEC_INTERNAL=OUTPUT_LINE_NUMBERS
```

: 0342 0 REQUIRE 'REQ:NBITS.REQ'; ! More "__" bit definitions for a few flags

Version: 'V04-000'

```

*****
*
*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
*  ALL RIGHTS RESERVED.
*
*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
*  ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
*  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
*  TRANSFERRED.
*
*  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
*  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
*  CORPORATION.
*
*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*
*****

```

```

++
FACILITY:      DSR (Digital Standard RUNOFF) / DSRPLUS
ABSTRACT:
  Defines BLD__, UND__, BLDUND__, OVR__, IND__, & HYP__.

```

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

```

      004      KAD00004      Keith Dawson      07-Mar-1983
      Global edit of all modules. Updated module names, idents,
      copyright dates. Changed require files to BLISS library.

```

```

--
MACRO
  BLD_?      = 0,1      ! Bolding bit.
  UND_?      = 1,1      ! Underlining bit.
  BLDUND_?   = 0,2      ! Bolding and underlining together.
  OVR_?      = 2,1      ! Overstrike bit.
  IND_?      = 3,1      ! Indexing bit.

```

G 15
15-Sep-1984 23:07:40
15-Sep-1984 22:53:15

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]NBITS.REQ;1

Page 16
(1)

```
: R0400 0
: MR0401 0
: R0402 0
: R0403 0
:
      HYP-X;
      = 4,1 ! Hyphenation bit.
      End of NBITS.REQ
```

H 15
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 17
(2)

: 0404 0 REQUIRE 'REQ:PAGEN.REQ'; ! SCT_... and PAGE_DEFINITION macros

R0405 0
R0406 0
R0407 0
R0408 0
R0409 0
R0410 0
R0411 0
R0412 0
R0413 0
R0414 0
R0415 0
R0416 0
R0417 0
R0418 0
R0419 0
R0420 0
R0421 0
R0422 0
R0423 0
R0424 0
R0425 0
R0426 0
R0427 0
R0428 0
R0429 0
R0430 0
R0431 0
R0432 0
R0433 0
R0434 0
R0435 0
R0436 0
R0437 0
R0438 0
R0439 0
R0440 0
R0441 0
R0442 0
R0443 0
R0444 0
R0445 0
R0446 0
R0447 0
R0448 0
R0449 0
R0450 0
R0451 0
R0452 0
R0453 0
R0454 0
R0455 0
R0456 0
R0457 0
R0458 0
R0459 0
R0460 0
R0461 0

Version: 'V04-000'

```
*****
*
*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
*  ALL RIGHTS RESERVED.
*
*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
*  ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
*  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
*  TRANSFERRED.
*
*  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
*  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
*  CORPORATION.
*
*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*
*****
```

```
**
FACILITY:      DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
  A page number carries with it not only its current value, but also
  codes as to how those values are to be displayed when they are finally
  output. It was decided to do it this way rather than have a separate
  table so that the program TCX would have less trouble.

ENVIRONMENT:   Transportable BLISS

AUTHOR:        Rich Friday

CREATION DATE: 1978

MODIFIED BY:
  004      KAN00004      Keith Dawson      07-Mar-1983
             Global edit of all modules. Updated module names, idents,
             copyright dates. Changed require files to BLISS library.
```

```
--
LITERAL
  page_sct_size = 4;

LITERAL
  sct_chapt      = 1,
  sct_index      = 2,
  sct_append     = 3;

!Type of section:
! Chapter section.
! Index section.
! Appendix section.
```



```

R0462 0
R0463 0
R0464 0 LITERAL
R0465 0     sct_low      = 1;           ! Lowest section type key.
R0466 0     sct_high    = 3;           ! Highest section type key.
R0467 0
R0468 0 MACRO
R0469 0     sct_typ      = 0, 0,      4,      0 %, ! Section Type (zero if none).
R0470 0     sct_page_d   = 0, 4,      4,      0 %, ! Display code for page number.
R0471 0     sct_sub_page = 0, %BPVAL/2, %BPVAL/2, 0 %, ! Subpage, if any (zero if none).
R0472 0     sct_number   = 1, 0,      %BPVAL, 0 %, ! Type of section number.
R0473 0     sct_page     = 2, 0,      %BPVAL, 0 %, ! Page number.
R0474 0     sct_subpg_d  = 3, 0,      4,      0 %, ! Display code for subpages.
R0475 0     sct_chapt_d  = 3, 4,      4,      0 %, ! Display code for chapters.
R0476 0     sct_appen_d  = 3, 8,      4,      0 %, ! Display code for appendices.
R0477 0     sct_index_d  = 3, 12,     4,      0 %; ! Display code if indexes.
R0478 0
R0479 0 MACRO
R0480 0     sct_run_page  = 3, %BPVAL/2, %BPVAL/2, 0 %; ! Running page number.
R0481 0
R0482 0 MACRO
R0483 0     page_definition = BLOCK [page_sct_size] %;
R0484 0
!
End of PAGEN.REQ

```

K 15
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 20
(2)

: 0485 0
: 0486 0 REQUIRE 'REQ:ARECCC.REQ'; ! AREC completion codes.

R0487 0
 R0488 0
 R0489 0
 R0490 0
 R0491 0
 R0492 0
 R0493 0
 R0494 0
 R0495 0
 R0496 0
 R0497 0
 R0498 0
 R0499 0
 R0500 0
 R0501 0
 R0502 0
 R0503 0
 R0504 0
 R0505 0
 R0506 0
 R0507 0
 R0508 0
 R0509 0
 R0510 0
 R0511 0
 R0512 0
 R0513 0
 R0514 0
 R0515 0
 R0516 0
 R0517 0
 R0518 0
 R0519 0
 R0520 0
 R0521 0
 R0522 0
 R0523 0
 R0524 0
 R0525 0
 R0526 0
 R0527 0
 R0528 0
 R0529 0
 R0530 0
 R0531 0
 R0532 0
 R0533 0
 R0534 0
 R0535 0
 R0536 0
 R0537 0
 R0538 0
 R0539 0
 R0540 0
 R0541 0
 R0542 0
 R0543 0

Version: 'V04-000'

```
*****
*
*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
*  ALL RIGHTS RESERVED.
*
*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
*  ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
*  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
*  TRANSFERRED.
*
*  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
*  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
*  CORPORATION.
*
*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*
*****
```

```
++
FACILITY:      DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
  Completion codes returned by AREC.

ENVIRONMENT:   Transportable BLISS

AUTHOR:        Rich Friday

CREATION DATE: 1978

MODIFIED BY:
  002      KAD00002      Keith Dawson      07-Mar-1983
           Global edit of all modules. Updated module names, idents,
           copyright dates. Changed require files to BLISS library.
```

```
--
LITERAL
END_OF_STRING  = 1,      ! The uneaten string has been exhausted.
CF_BREAK       = 2,      ! Special form of the .BREAK command.
CF_CF          = 3,      ! Two adjacent <CONTROL flag>s.
CF_COMMENT     = 4,      ! Special form of comment (.;).
CF_LETTER      = 5,      ! A <CONTROL flag> followed by a letter.
```

```

: R0544 0
: R0545 0
: R0546 0
: R0547 0
: R0548 0
: R0549 0
: R0550 0
: R0551 0
: R0552 0
: R0553 0
: R0554 0
: R0555 0
: R0556 0
: R0557 0
: R0558 0

      END_FOOTNOTE      = 6,      ! <ENDFOOTNOTE flag>.
      FIRST_SPACE       = 7,      ! A space or tab.
      FIRST_SEMI        = 8,      ! A semicolon (';').
      CF_OTHER          = 9,      ! <CONTROL flag> followed by something else.
      NOT_SPACE         = 10;     ! None of the other cases.
LITERAL ARECCC_COUNT    = 10;     ! Number of completion codes returned by AREC.
      !
      End of ARECCC.REQ
```

VAX-11 Bliss-32 V4.0-742 Page 23
_S255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 (2)

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
T
U
V
W
X
Y
Z

Version: 'V04-000'

```
*****
*
*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
*  ALL RIGHTS RESERVED.
*
*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
*  ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
*  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
*  TRANSFERRED.
*
*  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
*  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
*  CORPORATION.
*
*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*
*****
```

```
++
FACILITY:      DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
  Names for the actions associated with characters in the action table.

ENVIRONMENT:   Transportable BLISS

AUTHOR:        Rich Friday

CREATION DATE: 1978

MODIFIED BY:

    004      REM00004      Ray Marshall      17-November-1983
              Added macro for defining the size and type of ATABLE. Also
              defined ATABLE_LENGTH for use where it's length is involved
              in other calculations.

    003      REM00003      Ray Marshall      7-November-1983
              Added A_U_ALPHA & A_L_ALPHA as part of the added support for
              DEC multinational character set.

    002      KAD00002      Keith Dawson      07-Mar-1983
              Global edit of all modules. Updated module names, idents,
              copyright dates. Changed require files to BLISS library.
```

--X()X

LITERAL

! TRUE if the character is...

```

: R0617 0      A_SPACE      = 01,   | a space,
: R0618 0      A_TAB        = 02,   | a tab,
: R0619 0      A_FLAG       = 03,   | a flag,
: R0620 0      A_CONTROL    = 04,   | an ASCII contro character,
: R0621 0      A_U_LETTER   = 05,   | an upper-case letter,
: R0622 0      A_L_LETTER   = 06,   | a lower-case letter,
: R0623 0      A_DIGIT      = 07,   | a digit,
: R0624 0      A_INT_ESC    = 08,   | a RUNOFF internal escape character (RINTES),
: R0625 0      A_PUNCT      = 09,   | a punctuation mark;
: R0626 0      A_OTHER      = 10,   | ...or anything else not covered above.
: R0627 0      A_U_ALPHA    = 11,   | Uppercase multinational character
: R0628 0      A_L_ALPHA    = 12,   | Lowercase multinational character
: R0629 0
: R0630 0      LITERAL
: R0631 0      ACTION_COUNT = 12;   ! Number of actions
: R0632 0
: R0633 0      LITERAL
: R0634 0      atable_length = 256; ! Number of cells in ATABLE
: R0635 0
: R0636 0      MACRO
: MR0637 0      atable_definition =
: R0638 0          VECTOR [atable_length, BYTE]%;

```

```
: 0639 0
: U 0640 0      %IF DSRPLUS %THEN
: U 0641 0      REQUIRE 'REQ:ATTCC.REQ';      ! Completion codes for routines in ATTRIB
: 0642 0      %FI
: 0643 0
: 0644 0      REQUIRE 'REQ:BOOL.REQ';      ! TRUE & FALSE literals (only)
```


Version: 'V04-000'

```
*****
*
*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
*  ALL RIGHTS RESERVED.
*
*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
*  ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
*  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
*  TRANSFERRED.
*
*  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
*  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
*  CORPORATION.
*
*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*****
```

++
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
Definitions of Boolean items TRUE and FALSE.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

002 KAD00002 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.

--
LITERAL
TRUE = 1;
FALSE = 0;

! End of BOOL.REQ

; 0697 0 REQUIRE 'REQ:BRNRTY.REQ'; ! .BRN-format binary file record def's.

R0698 0
 R0699 0
 R0700 0
 R0701 0
 R0702 0
 R0703 0
 R0704 0
 R0705 0
 R0706 0
 R0707 0
 R0708 0
 R0709 0
 R0710 0
 R0711 0
 R0712 0
 R0713 0
 R0714 0
 R0715 0
 R0716 0
 R0717 0
 R0718 0
 R0719 0
 R0720 0
 R0721 0
 R0722 0
 R0723 0
 R0724 0
 R0725 0
 R0726 0
 R0727 0
 R0728 0
 R0729 0
 R0730 0
 R0731 0
 R0732 0
 R0733 0
 R0734 0
 R0735 0
 R0736 0
 R0737 0
 R0738 0
 R0739 0
 R0740 0
 R0741 0
 R0742 0
 R0743 0
 R0744 0
 R0745 0
 R0746 0
 R0747 0
 R0748 0
 R0749 0
 R0750 0
 R0751 0
 R0752 0
 R0753 0
 R0754 0

Version: 'V04-C00'

```
*****
*
*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
*  ALL RIGHTS RESERVED.
*
*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
*  ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
*  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
*  TRANSFERRED.
*
*  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
*  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
*  CORPORATION.
*
*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*
*****
```

++
 FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
 Binary RuNoff file record type definitions

ENVIRONMENT: Transportable BLISS

AUTHOR: J.P. Kellerman

CREATION DATE: January 1982

MODIFIED BY:

003 KAD00003 Keith Dawson 07-Mar-1983
 Global edit of all modules. Updated module names, idents,
 copyright dates. Changed require files to BLISS library.

--

File Identification Record Group

LITERAL

```
BRN_FILE = -1,      ! Identifies file as .BRN format
BRN_IDENT = 2,      ! .BRN format revisior. level
INDEX_FORMAT = 2,   ! Index record group format revision level
TOC_FORMAT = 3,     ! Table of contents record group format revision level
CROSSREF_FORMAT = 1; ! Cross reference record group format revision level
```

```

: R0755 0
: R0756 0
: R0757 0
: R0758 0
: R0759 0
: R0760 0
: R0761 0
: R0762 0
: R0763 0
: R0764 0
: R0765 0
: R0766 0
: R0767 0
: R0768 0
: R0769 0
: R0770 0
: R0771 0
: R0772 0
: R0773 0
: R0774 0
: R0775 0
: R0776 0

```

Record Group Header

A record group header identifies the following record group.
 This allows a utility program to skip record groups pertaining
 to other programs without having to know their structure.

```

LITERAL
  BRN_INDEX = 1,           ! Identifies index record groups
  BRN_CONTENTS = 2,        ! Identifies table of contents record groups
  BRN_CROSSREF = 3;        ! Identifies cross reference record groups

```

Cross Reference Record groups

```

LITERAL
  NEW_CROSSREF = 1,        ! Identification record group
  CROSSREF_REFERENCEPOINT = 2; ! Reference point record group

```

End of BRNRTY.REQ

I 16
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742 Page 31
_ \$255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 (2)

: 0777 0 REQUIRE 'REQ:CLHCC.REQ'; ! CLH_... status return codes

Version: 'V04-000'

```

*****
*
*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
*  ALL RIGHTS RESERVED.
*
*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
*  ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
*  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
*  TRANSFERRED.
*
*  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
*  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
*  CORPORATION.
*
*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*
*****

```

```

**
FACILITY:      DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
  Condition codes returned by CLH.

ENVIRONMENT:   Transportable BLISS

AUTHOR:        Rich Friday

CREATION DATE: 1978

MODIFIED BY:
  002      KAD00002      Keith Dawson      07-Mar-1983
           Global edit of all modules. Updated module names, idents,
           copyright dates. Changed require files to BLISS library.

```

```

--
LITERAL
  CLH_NORMAL      = 01,      ! Normal for all requests.
  CLH_CANT_OPEN   = 02,      ! For bad CLH_OPEN_INPUT/OUTPUT.
  CLH_END_FILE    = 02,      ! End of file for CLH_READ_INPUT.
  CLH_CANT_READ   = 03,      ! Bad CLH_READ_INPUT.
  CLH_TOO_LONG    = 04,      ! Record too long on CLH_READ_INPUT.

```

K 16
15-Sep-1984 23:07:40
15-Sep-1984 22:49:55

VAX-11 Bliss-32 V4.0-742
_ \$255\$DUA28:[RUNOFF.SRC]CLHCC.REQ;1 Page 33
(1)

```
: R0835 0
: R0836 0      CLH_NO_SPACE    = 05;    ! No memory available.
: R0837 0
: R0838 0
: R0839 0      LITERAL      CLH_CC_COUNT  = 05;    ! Number of condition codes defined.
: R0840 0
: R0841 0      !
:                               End of CLHCC.REQ
```

L 16
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 34
(2)

; 0842 0 REQUIRE 'REQ:CLHOPS.REQ'; ! CLH... operation codes

Version: 'V04-000'

```

*****
*
*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
*  ALL RIGHTS RESERVED.
*
*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
*  ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
*  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
*  TRANSFERRED.
*
*  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
*  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
*  CORPORATION.
*
*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*
*****

```

```

**
FACILITY:      DSR (Digital Standard RUNOFF) / DSRPLUS
ABSTRACT:
  Definition of operations that can be performed by CLH.

```

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

```

      006      KAD00006      Keith Dawson      07-Mar-1983
      Global edit of all modules. Updated module names, idents,
      copyright dates. Changed require files to BLISS library.

```

LITERAL

```

CLH_OPEN_INPUT      = 1,      ! Open primary input file.
CLH_OPEN_OUT        = 2,      ! Open output file.
CLH_CLOSE_INPUT     = 3,      ! Close current input file.
CLH_CLOSE_OUT       = 4,      ! Close output file.
CLH_READ_INPUT      = 5,      ! Read a record from current input file.
CLH_WRITE_OUT       = 6,      ! Write a record to output file, add CRLF.
CLH_PUSH            = 7,      ! Save current input-file status on stack.
CLH_POP             = 8,      ! Get back previous input-file status.
CLH_OPEN_REQ        = 9,      ! Open a nested file (.REQUIRE "file-spec").

```

```
: R0900 0      CLH_CLOSE_REQ      = 10,  ! Close the top-most .REQUIRE file.
: R0901 0      CLH_OUT_NOCRLF     = 11,  ! Write a record, but don't add CRLF.
: R0902 0      CLH_CLOSE_DEL_OUT  = 12,  ! Close and delete output file.
: R0903 0      CLH_OPEN_INIT      = 13,  ! Open initialization file.
: R0904 0
: R0905 0      LITERAL
: R0906 0      CLH_OPS_COUNT      = 13;
: R0907 0
: R0908 0      !                  End of CLHOPS.REQ
```

; 0909 0 REQUIRE 'REQ:CONVRT.REQ'; ! TCONVRT_... def's (string conversion codes)

D 1
15-Sep-1984 23:07:40
15-Sep-1984 22: :30

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]CONVRT.REQ;1 Page 38
(1)

Version: 'V04-000'

```
*****
*   COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
*   DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
*   ALL RIGHTS RESERVED.
*
*   THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
*   ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
*   INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
*   COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
*   OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
*   TRANSFERRED.
*
*   THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
*   AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
*   CORPORATION.
*
*   DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
*   SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*****
```

++
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
Literals defining names for how to do conversions from binary to the
appropriate string type.

It's not possible to have a display code larger than 15 without
changing the data structures defined in PAGEN.REQ.

OTHER NOTES:
If the definitions of the literals defined here change (except for
additions), look at DSPAG to be sure nothing has been broken.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

002 KAD00002 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.

--
LITERAL
TCONVRT_DEC_NOZ = 0,

!Convert to decimal, no leading zeros.

```

: R0967 0      TCONVRT_DEC_ZER = 1,
: R0968 0      TCONVRT_LET_UPP = 2,
: R0969 0      TCONVRT_LET_LOW = 3,
: R0970 0      TCONVRT_LET_MIX = 4,
: R0971 0      TCONVRT_ROM_UPP = 5,
: R0972 0      TCONVRT_ROM_LOW = 6,
: R0973 0      TCONVRT_ROM_MIX = 7,
: R0974 0      TCONVRT_OCT_NOZ = 8,
: R0975 0      TCONVRT_HEX_NOZ = 9;
: R0976 0
: R0977 0      LITERAL
: R0978 0      TCONVRT_LOW      = 0,
: R0979 0      TCONVRT_HIGH     = 9;
: R0980 0
: R0981 0      !
                        End of CONVRT.REQ

```

```

E 1
15-Sep-1984 23:07:40    VAX-11 Bliss-32 V4.0-742    Page 39
15-Sep-1984 22:50:30    _$255$DUA28:[RUNOFF.SRC]CONVRT.REQ;1 (1)

: Convert to decimal, leading zeros.
: Convert to letters, all upper-case.
: Convert to letters, all lower-case.
: Convert to letters, capitalize first one.
: Convert to roman numerals, all upper-case.
: Convert to roman numerals, all lower-case.
: Convert to roman numerals, capitalize first letter.
: Convert to octal, no leading zeros.
: Convert to hex, no leading zeros.

! Lowest total conversion code.
! Highest total conversion code.

```

F 1
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 40
(2)

```
: 0982 0
: U 0983 0  %IF DSRPLUS %THEN
: U 0984 0  REQUIRE 'REQ:CREFDS.REQ';      ! Cross-referencing data structures
: 0985 0  %FI
: 0986 0
: 0987 0  REQUIRE 'REQ:DIGIT.REQ';      . Macro to test if a character is a digit
```

Version: 'V04-000'

```
*****
*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
*  ALL RIGHTS RESERVED.
*
*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
*  ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
*  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
*  TRANSFERRED.
*
*  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
*  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
*  CORPORATION.
*
*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*****
```

++
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
Macro to test if a character is a digit.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

002 KAD00002 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.

--
MACRO
DIGIT(KHAR) =
(KHAR GEQ %C'0' and KHAR LEQ %C'9')
%;

End of DIGIT.REQ

```
: 1041 0  !! REQUIRE 'REQ:DMDEFS.REQ';  ! Dynamic-memory management definitions
: 1042 0  REQUIRE 'REQ:ECC.REQ';      ! Definitions for the Entity Counter/Caption Area
```


1 1
15-Sep-1984 23:07:40
15-Sep-1984 22:50.59

VAX-11 Bliss-32 V4.0-742
_S255\$DUA28:[RUNOFF.SRC]ECC.REQ;1

Page 43
(1)

Version: 'V04-000'

```
*****
*
*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
*  ALL RIGHTS RESERVED.
*
*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
*  ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
*  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
*  TRANSFERRED.
*
*  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
*  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
*  CORPORATION.
*
*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*
*****
```

```
++
FACILITY:      DSR (Digital Standard RUNOFF) / DSRPLUS
ABSTRACT:
  Definitions for the ECC (Entity Counter/Caption area).
```

ENVIRONMENT: Transportable BLISS

AUTHOR: Keith Dawson

CREATION DATE: 1982

MODIFIED BY:

004 KFA00004 Ken Alden 07-Jul-1983
Made the counter into a full integer.

003 KAD00003 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, ids, copyright dates. Changed require files to BLISS library.

--

\$FIELD ECC_FIELDS =

SET
ECC\$V_OPTIONS = [\$SHORT_INTEGER],

\$OVERLAY (ECC\$V_OPTIONS)

ECC\$V_BOLD = [\$BIT],

!Make entity caption bold.

```

R1100 0 ECCSV_UNDERLINE = [$BIT], !Underline entity caption.
R1101 0 ECCSV_UNNUMBERED = [$BIT], !Do not display counter for this entity.
R1102 0 ECCSV_BREAK = [$BIT], !Start a new line after entity/CHAPTER/APPENDIX.
R1103 0 ECCSV_TOCPAGE = [$BIT], !Put a page number in the TOC.
R1104 0 ECCSV_PAGE = [$BIT], !Start a new page before CHAPTER or APPENDIX.
R1105 0 ECCSV_STARTODD = [$BIT], !Start this chapter/appendix on an odd-numbered page.
R1106 0
R1107 0 $CONTINUE
R1108 0
R1109 0 ECCSH_RUNIN = [$TINY_INTEGER], !Run in caption with text.
R1110 0 ECCSH_CASE = [$TINY_INTEGER], !Case rules for caption (see values below).
R1111 0 ECCSH_POSITION = [$TINY_INTEGER], !Placement of header (see values below).
R1112 0
R1113 0 ECCSH_AFTER = [$SHORT_INTEGER], !This many blank lines after header.
R1114 0 ECCSH_BEFORE = [$SHORT_INTEGER], !Skip this many lines before header.
R1115 0 ECCSH_BETWEEN = [$SHORT_INTEGER], !Skip this many lines between 'CHAPTER' and the title.
R1116 0 ECCSH_SPACES = [$SHORT_INTEGER], !Number of spaces between counter and caption.
R1117 0 ECCSH_TESTPAGE = [$SHORT_INTEGER], !Generate test-page for this many lines.
R1118 0 ECCSH_COUNTER = [$INTEGER], !Counter for this entity.
R1119 0 ECCSH_DISPLAY_DESC = [$SHORT_INTEGER], !RUNOFF display descriptor.
R1120 0 ECCSH_PRE_LEN = [$SHORT_INTEGER], !Before-counter text length.
R1121 0 ECCSH_PRE_PTR = [$POINTER], !Before-counter text pointer.
R1122 0 ECCSH_POST_LEN = [$SHORT_INTEGER], !After-counter text length.
R1123 0 ECCSH_POST_PTR = [$POINTER], !After-counter text pointer.
R1124 0
R1125 0 TES:
R1126 0
R1127 0 LITERAL
R1128 0 ECCSK_LENGTH = $FIELD_SET_SIZE:
R1129 0
R1130 0 ! Values for ECCSH_CASE:
R1131 0 LITERAL
R1132 0 ECCSK_LEAVECASE = 0,
R1133 0 ECCSK_FIRSTCAP = 1, !Make entity caption initial-cap.
R1134 0 ECCSK_ALLCAP = 2, !Make caption all-caps.
R1135 0
R1136 0 ! Values for ECCSH_POSITION:
R1137 0 LITERAL
R1138 0 ECCSK_LEFT = 0, !Make the entity caption flush-left.
R1139 0 ECCSK_RIGHT = 1, !Make the entity caption flush-right.
R1140 0 ECCSK_CENTER = 2, !Center entity caption.
R1141 0 ECCSK_ALTERNATE = 3, !(nyi) Alternate flush-left, flush-right.
R1142 0
R1143 0 !
R1144 0 ! Offsets of counters for example, figure, and table in the ECC structure
R1145 0 ! (Entity Counter / Caption area).
R1146 0
R1147 0 LITERAL
R1148 0 EXAMP_OFFSET = 0, ! Examples
R1149 0 FIGUR_OFFSET = 1, ! Figures
R1150 0 TABLE_OFFSET = 2, ! Tables
R1151 0 HCOLL_OFFSET = 3, ! Collecting headers
R1152 0 HL1_OFFSET = 4, ! HL 1
R1153 0 HL2_OFFSET = 5, ! HL 2
R1154 0 HL3_OFFSET = 6, ! HL 3
R1155 0
R1156 0

```

K 1
15-Sep-1984 23:07:40
15-Sep-1984 22:50:59

VAX-11 Bliss-32 V4.0-742
_S255\$DUA28:[RUNOFF.SRC]ECC.REQ;1

Page 45
(1)

```

R1157 0      HL4_OFFSET      = 7,      | HL 4
R1158 0      HL5_OFFSET      = 8,      | HL 5
R1159 0      HL6_OFFSET      = 9,      | HL 6
R1160 0      CHAP_OFFSET      = 10,     | Chapters
R1161 0      APPEND_OFFSET    = 11;     | Appendix
R1162 0
R1163 0      LITERAL
R1164 0      MAX_ECC_OFFSET    = 11;
R1165 0
R1166 0      LITERAL
R1167 0      : 3 SECC BLOCKs for example, figure, table;
R1168 0      : 1 for the Header-collecting block;
R1169 0      : 6 for the header levels.
R1170 0      : 1 for Chapters.
R1171 0      : 1 for Appendix.
R1172 0      MAX_ECC = 3 + 1 + 6 + 1 + 1;
R1173 0
R1174 0      MACRO
R1175 0      SECC_BLOCK =
R1176 0      BLOCK [ECC$K_LENGTH] FIELD (ECC_FIELDS) %;
R1177 0
R1178 0      MACRO
R1179 0      SECC_BLOCKVECTOR =
R1180 0      BLOCKVECTOR [MAX_ECC, ECC$K_LENGTH] FIELD (ECC_FIELDS) %;
R1181 0
R1182 0      !
                End of ECC.REQ
```

1
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 46
(2)

: 1183 0 REQUIRE 'REQ:FFDEFS.REQ'; ! F00_... opcodes and status values for F00FIL

Version: 'V04-000'

```

*****
*
*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
*  ALL RIGHTS RESERVED.
*
*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
*  ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
*  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
*  TRANSFERRED.
*
*  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
*  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
*  CORPORATION.
*
*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*
*****

```

```

++
FACILITY:      DSR (Digital Standard RUNOFF) / DSRPLUS
ABSTRACT:
  Literals defining FOOFIL operations and return values.

```

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1982

MODIFIED BY:

```

      005      KAD00005      Keith Dawson      07-Mar-1983
              Global edit of all modules. Updated module names, idents,
              copyright dates. Changed require files to BLISS library.

```

--

LITERAL

```

FOO_INIT = 0,      ! Initialize FOOIOB.
FOO_OPIN = 1,      ! Open footnote file for input.
FOO_OPOU = 2,      ! Open footnote file for output.
FOO_READ = 3,      ! Read a record from footnote file.
FOO_WRIT = 4,      ! Write a record to the footnote file.
FOO_CLOS = 5,      ! Close the footnote file.
FOO_DELE = 6,      ! Delete the footnote file.
FOO_CLEAN = 7,     ! Discard footnotes that have been output.
FOO_RHDR = 8,      ! Read a record header.

```

N 1
15-Sep-1984 23:07:40
15-Sep-1984 22:51:04

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]FFDEFS.REQ;1 Page 48 (1)

```

: R1241 0      FOO_PREAD= 9      !Read a 'pass-through' record.
: R1242 0      FOO_PWRIT= 10;    !Write a 'pass-through' record.
: R1243 0
: R1244 0      LITERAL
: R1245 0      FFOO_OP  = 10;    !Highest operation code.
: R1246 0      LITERAL
: R1247 0
: R1248 0      FOO_NORMAL = 1,    !Operation done ok.
: R1249 0      FOO_ENDFIL = 2,    !End of file on write.
: R1250 0      FOO_BAD   = 3;    !Couldn't perform operation.
: R1251 0
: R1252 0      !
:                               End of FFDEFS.REQ

```

B 2
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 49
(2)

: 1253 0 REQUIRE 'REQ:FLGT.REQ'; ! FLAG Table items

C 2
15-Sep-1984 23:07:40
15-Sep-1984 22:51:14

VAX-11 Bliss-32 V4.0-742
_S255\$DUA28:[RUNOFF.SRC]FLGT.REQ;1

Page 50
(1)

Version: 'V04-000'

```
*****
*
*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
*  ALL RIGHTS RESERVED.
*
*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
*  ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
*  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
*  TRANSFERRED.
*
*  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
*  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
*  CORPORATION.
*
*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*
*****
```

++
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
Flag table: values and status of flag characters.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

005 KFA00005 Ken Alden 21-Mar-1983
For DSRPLUS: eliminated the passthrough flag.

004 KFA00004 Ken Alden 15-Mar-1983
For DSRPLUS: added bits for passthrough flag.

003 KAD00003 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idsents,
copyright dates. Changed require files to BLISS library.

--

In the following definitions, 3-character abbreviations are used for the names of the flags:

abbrev- viation	flag	abbrev- viation	flag
COM	Comment	BLD	Bold
SUB	Substitute	SPA	Space
EFO	Erdfootnote	IND	Index
CON	Control	HYP	Hyphenate
QUO	Accept (ne Quote)	OVR	Overstrike
UPP	Uppercase	SBX	Subindex
LOW	Lowercase	PER	Period
CAP	Capitalize	BRK	Break
UND	Underline	NPX	No-permute-index

LITERAL
FLAG_COUNT = 18; ! Number of flags.

LITERAL
SUB_FLAG = 0.
EFO_FLAG = 1.
CON_FLAG = 2.
QUO_FLAG = 3.
UPP_FLAG = 4.
LOW_FLAG = 5.
CAP_FLAG = 6.
UND_FLAG = 7.
BLD_FLAG = 8.
SPA_FLAG = 9.
IND_FLAG = 10.
HYP_FLAG = 11.
OVR_FLAG = 12.
SBX_FLAG = 13.
COM_FLAG = 14.
PER_FLAG = 15.
BRK_FLAG = 16.
NPX_FLAG = 17;

LITERAL
FLAG_ENABLED = 0;
FLAG_CHARACTER = 1;

! The FLAG_TABLE structure does not need to use %UPVAL to be on -11s and VAX,
! because the information there can be saved in single bytes.

STRUCTURE
FLAG_TABLE[[I,J;N=FLAG_COUNT] =
[2 * N * %UPVAL]
(If J eql FLAG_ENABLED
then FLAG_TABLE[E + (I * %UPVAL)
else FLAG_TABLE + (FLAG_COUNT + I)*%UPVAL);

MACRO
FLGT_DEFINITION =
FLAG_TABLE[FLAG_COUNT]%;

R1306 0
R1307 0
R1308 0
R1309 0
R1310 0
R1311 0
R1312 0
R1313 0
R1314 0
R1315 0
R1316 0
R1317 0
R1318 0
R1319 0
R1320 0
R1321 0
R1322 0
R1323 0
R1324 0
R1325 0
R1326 0
R1327 0
R1328 0
R1329 0
R1330 0
R1331 0
R1332 0
R1333 0
R1334 0
R1335 0
R1336 0
R1337 0
R1338 0
R1339 0
R1340 0
R1341 0
R1342 0
R1343 0
R1344 0
R1345 0
R1346 0
R1347 0
R1348 0
R1349 0
R1350 0
R1351 0
R1352 0
R1353 0
R1354 0
R1355 1
R1356 2
R1357 0
R1358 0
R1359 0
MR1360 0
R1361 0
R1362 0

E 2
15-Sep-1984 23:07:40
15-Sep-1984 22:51:14

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]FLGT.REQ;1

Page 52
(2)

: R1363 0 !

End of FLGT.REQ

F 2
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 BLISS-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 53
(2)

; 1364 0 REQUIRE 'REQ:FLIPCHARS.REQ'; ! FLIP\$K_... special characters

Version: 'V04-000'

COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
ALL RIGHTS RESERVED.

THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
TRANSFERRED.

THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
CORPORATION.

DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.

FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
This file contains the definitions of the FLIP special text characters.

ENVIRONMENT: Transportable BLISS

AUTHOR: George Hetrick

CREATION DATE: 19-Feb-1982

MODIFIED BY:

002 KAD00002 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.

FLIP special characters, inserted into output file

\$LITERAL

FLIP\$K_START_BOLD = \$DISTINCT,
FLIP\$K_START_UNDERLINE = \$DISTINCT,
FLIP\$K_END_BOLD = \$DISTINCT,
FLIP\$K_END_UNDERLINE = \$DISTINCT;

H 2
15-Sep-1984 23:07:40
15-Sep-1984 22:51:21

VAX-11 Bliss-32 V4.0-742
[RUNOFF.SRC]FLIPCHARS.REQ;1

Page 55
(1)

; R1422 0 !

End of FLIPCHARS.REQ

; 1423 0 REQUIRE 'REQ:FLIPRECS.REQ'; ! FLIP macro, record, & field definitions and MAX_LEVELS.

*TITLE 'FLIPRECS -- FLIP/RUNOFF record formats'

Version: 'V04-000'

* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
* DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
* ALL RIGHTS RESERVED.

* THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
* ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
* INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
* COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
* OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
* TRANSFERRED.

* THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
* AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
* CORPORATION.

* DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
* SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.

**
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUSABSTRACT:
This file documents the records emitted by RUNOFF for processing by FLIP.ENVIRONMENT:
DSRPLUS

AUTHOR: George C. Hetrick

CREATION DATE: 1981

MODIFIED BY:

003 KAD00003 Keith Dawson 17-May-1983
Made all - CODEs [STINY INTEGER]'s again. The reason for
having changed to [INTEGER]'s in the first place has gone
away: FLIP code is now more tightly conditionalized (for
the benefit of TOPS-20 mainly).

002 KAD00002 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.

--

*sbttl 'FLIP/RUNOFF record types';

FLIPRECS -- FLIP/RUNOFF record formats
FLIP/RUNOFF record types

K 2
15-Sep-1984 23:07:40
15-Sep-1984 22:51:29

VAX-11 Bliss-32 V4.0-742 Page 58
_S255\$DUA28:[RUNOFF.SRC]FLIPRECS.REQ,1 (1)

```
.. R1481 0
.. R1482 0
.. R1483 0
.. R1484 0
.. R1485 0
.. R1486 0
.. R1487 0
.. R1488 0
.. R1489 0
.. R1490 0
.. R1491 0
.. R1492 0
.. R1493 0
.. R1494 0
.. R1495 0

SLITERAL
    FLIP$K_INIT = $DISTINCT,
    FLIP$K_RNOTXT = $DISTINCT,
    FLIP$K_TCXTXT = $DISTINCT,
    FLIP$K_TCXXTN = $DISTINCT,
    FLIP$K_TCXINI = $DISTINCT,
    FLIP$K_TOCRD = $DISTINCT,
    FLIP$K_TOCTXT = $DISTINCT,
    FLIP$K_TOCPAG = $DISTINCT,
    FLIP$K_TOCHLI = $DISTINCT,
    FLIP$K_TOCHL = $DISTINCT,
    FLIP$K_NEWPAG = $DISTINCT;

LITERAL
    FLIP$K_VERSION = 1;
```


FLIPRECS -- FLIP/RUNOFF record formats
INIT -- initial FLIP record

L 2
15-Sep-1984 23:07:40
15-Sep-1984 22:51:29

VAX-11 Bliss-32 V4.0-742 Page 59
_S255SDUA28:[RUNOFF.SRC]FLIPRECS.REQ;1 (2)

```

R1496 0
R1497 0
R1498 0
R1499 0
R1500 0
R1501 0
R1502 0
R1503 0
R1504 0
R1505 0
R1506 0
R1507 0
R1508 0
R1509 0
R1510 0
R1511 0
R1512 0
R1513 0
R1514 0

%sbttl 'INIT -- initial FLIP record';

$FIELD
    $FLIP$INIT_FIELDS = SET
        INIT_CODE      = [$TINY_INTEGER],    ! record type
        INIT_FLAGS     = [$BYTE],            ! various flags
        $OVERLAY(INIT_FLAGS)
        INIT_CONTENTS  = [$BIT],              ! was /CONTENTS specified
        $CONTINUE
        INIT_LEVEL     = [$SHORT_INTEGER]     ! FLIP version
    TES;
    ! Size in UNITS

LITERAL
    FLIP$K_INIT_LENGTH = $FIELD SET SIZE,    ! Size in FULLWORDS
    FLIP$K_INIT_SIZE   = %UPVAL*$FIELD_SET_SIZE; ! Size in UNITS

MACRO
    $FLIP_INIT = BLOCK[FLIP$K_INIT_LENGTH] FIELD($FLIP$INIT_FIELDS)%;
```

FLIPRECS -- FLIP/RUNOFF record formats
RNOTXT -- text record

M 2
15-Sep-1984 23:07:40
15-Sep-1984 22:51:29

VAX-11 Bliss-32 V4.0-742 Page 60
_S255\$DUA28:[RUNOFF.SRC]FLIPRECS.REQ;1 (3)

%sbttl 'RNOTXT -- text record';

\$FIELD

\$FLIP\$RNOTXT_FIELDS1= SET

RNOTXT_CODE = [\$TINY_INTEGER] ! record type

RNOTXT_LENGTH = [\$SHORT_INTEGER] ! length of data portion

TES;

LITERAL

FLIP\$K_RNOTXT_BASELEN = \$FIELD_SET_SIZE, ! Size in FULLWORDS

FLIP\$K_RNOTXT_BASESIZ = %UPVAL*\$FIELD_SET_SIZE;
! Size in UNITS

\$FIELD

\$FLIP\$RNOTXT_FIELDS2= SET

RNOTXT_FILLER = [\$SUB_BLOCK(FLIP\$K_RNOTXT_BASELEN)],

RNOTXT_TEXT = [\$SUB_BLOCK(1000)] ! TEXT segment

TES;

LITERAL

FLIP\$K_RNOTXT_LENGTH = \$FIELD_SET_SIZE, ! Size in FULLWORDS

FLIP\$K_RNOTXT_SIZE = %UPVAL*\$FIELD_SET_SIZE; ! Size in UNITS

MACRO

\$FLIP_RNOTXT = BLOCK[FLIP\$K_RNOTXT_LENGTH] FIELD(\$FLIP\$RNOTXT_FIELDS1,
\$FLIP\$RNOTXT_FIELDS2)%;

FLIPRECS -- FLIP/RUNOFF record formats
TOCTXT -- TOC text record

N 2
15-Sep-1984 23:07:40
15-Sep-1984 22:51:29

VAX-11 Bliss-32 V4.0-742
_S255\$DUA28:[RUNOFF.SRC]FLIPRECS.REQ;1 Page 61 (4)

%sbttl 'TOCTXT -- TOC text record';

\$FIELD

\$FLIP\$TOCTXT_FIELDS1= SET

TOCTXT_CODE = [\$TINY_INTEGER], ! record type
TOCTXT_MAJOR = [\$TINY_INTEGER], ! major code
TOCTXT_MINOR = [\$TINY_INTEGER], ! minor code
TOCTXT_LENGTH = [\$INTEGER] ! length of data portion

TES;

LITERAL

FLIP\$K_TOCTXT_BASELEN = \$FIELD_SET_SIZE, ! Size in FULLWORDS

FLIP\$K_TOCTXT_BASESIZ = %UPVAL*\$FIELD_SET_SIZE; ! Size in UNITS

\$FIELD

\$FLIP\$TOCTXT_FIELDS2= SET

TOCTXT_FILLER = [\$SUB_BLOCK(FLIP\$K_TOCTXT_BASELEN)],
TOCTXT_TEXT = [\$SUB_BLOCK(1000)] ! TEXT segment

TES;

LITERAL

FLIP\$K_TOCTXT_LENGTH = \$FIELD_SET_SIZE, ! Size in FULLWORDS

FLIP\$K_TOCTXT_SIZE = %UPVAL*\$FIELD_SET_SIZE; ! Size in UNITS

MACRO

\$FLIP_TOCTXT = BLOCK[FLIP\$K_TOCTXT_LENGTH] FIELD(\$FLIP\$TOCTXT_FIELDS1,
\$FLIP\$TOCTXT_FIELDS2)%;

: R1543 0
: R1544 0
: R1545 0
: R1546 0
: R1547 0
: R1548 0
: R1549 0
: R1550 0
: R1551 0
: R1552 0
: R1553 0
: R1554 0
: R1555 0
: R1556 0
: R1557 0
: R1558 0
: R1559 0
: R1560 0
: R1561 0
: R1562 0
: R1563 0
: R1564 0
: R1565 0
: R1566 0
: R1567 0
: R1568 0
: R1569 0
: MR1570 0
: R1571 0
: R1572 0

FLIPRECS -- FLIP/RUNOFF record formats
TOCRD -- TOC descriptor

B 3
15-Sep-1984 23:07:40
15-Sep-1984 22:51:29

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]FLIPRECS.REQ;1 (5) Page 62

%sbttl 'TOCRD -- TOC descriptor';

\$FIELD

\$FLIP\$TOCRD_FIELDS = SET
TOCRD_CODE = [\$TINY_INTEGER], ! record type
TOCRD_MAJOR = [\$INTEGER], ! major code
TOCRD_MINOR = [\$INTEGER] ! minor code

TES;

LITERAL

FLIP\$K_TOCRD_LENGTH = \$FIELD SET SIZE, ! Size in FULLWORDS
FLIP\$K_TOCRD_SIZE = %UPVAL*\$FIELD_SET_SIZE; ! Size in UNITS

MACRO

\$FLIP_TOCRD = BLOCK[FLIP\$K_TOCRD_LENGTH] FIELD(\$FLIP\$TOCRD_FIELDS)%;

FLIPRECS -- FLIP/RUNOFF record formats
TOCPAG -- TOC page record

3
15-Sep-1984 23:07:40
15-Sep-1984 22:51:29

VAX-11 Bliss-32 V4.0-742 Page 63
_\$255\$DUA28:[RUNOFF.SRC]FLIPRECS.REQ;1 (6)

%sbttl 'TOCPAG -- TOC page record';

\$FIELD

\$FLIP\$TOCPAG_FIELDS = SET

TOCPAG_CODE = [\$TINY_INTEGER] ! record type

TOCPAG_PAGENO = [\$SUB_BLOCK(PAGE_SCT_SIZE)] ! page number segment

TES;

LITERAL

FLIP\$K_TOCPAG_LENGTH = \$FIELD_SET_SIZE, ! Size in FULLWORDS

FLIP\$K_TOCPAG_SIZE = %UPVAL*\$FIELD_SET_SIZE; ! Size in UNITS

MACRO

\$FLIP_TOCPAG = BLOCK[FLIP\$K_TOCPAG_LENGTH] FIELD(\$FLIP\$TOCPAG_FIELDS)%;

FLIPRECS -- FLIP/RUNOFF record formats
TCXXTN -- index

0 3
15-Sep-1984 23:07:40
15-Sep-1984 22:51:29

VAX-11 Bliss-32 V4.0-742 Page 64
_S255\$DUA28:[RUNOFF.SRC]FLIPRECS.REQ;1 (7)

%sbttl 'TCXXTN -- index';

\$FIELD

\$FLIP\$TCXXTN_FIELDS = SET

TCXXTN_CODE = [\$TINY_INTEGER], ! record type

\$ALIGN(FULLWORD)

TCXXTN_XTN = [\$INTEGER], ! transaction type

TCXXTN_SCT = [\$SUB_BLOCK(PAGE_SCT_SIZE)] ! page number segment

TES;

LITERAL

FLIP\$K_TCXXTN_LENGTH = \$FIELD_SET_SIZE, ! Size in FULLWORDS

FLIP\$K_TCXXTN_SIZE = %UPVAL*\$FIELD_SET_SIZE; ! Size in UNITS

MACRO

\$FLIP_TCXXTN = BLOCK[FLIP\$K_TCXXTN_LENGTH] FIELD(\$FLIP\$TCXXTN_FIELDS)%;

FLIPRECS -- FLIP/RUNOFF record formats
TOCHLI -- TOC header level info record

E 3
15-Sep-1984 23:07:40
15-Sep-1984 22:51:29

VAX-11 Bliss-32 V4.0-742 Page 65
_S255SDUA28:[RUNOFF.SRC]FLIPRECS.REQ;1 (8)

%sbttl 'TOCHLI -- TOC header level info record';

\$FIELD

\$FLIP\$TOCHLI_FIELDS = SET

TOCHLI_CODE = [\$TINY_INTEGER], ! record type

TOCHLI_HLLIST = [\$SUB_BLOCK(2+MAX_LEVELS)], ! header level info

TOCHLI_HLDSP = [\$SUB_BLOCK(MAX_LEVELS)] ! header level display info

TES;

LITERAL

FLIP\$K_TOCHLI_LENGTH = \$FIELD_SET_SIZE, ! Size in FULLWORDS

FLIP\$K_TOCHLI_SIZE = %UPVAL*\$FIELD_SET_SIZE; ! Size in UNITS

MACRO

\$FLIP_TOCHLI = BLOCK[FLIP\$K_TOCHLI_LENGTH] FIELD(\$FLIP\$TOCHLI_FIELDS)%;

FLIPRECS -- FLIP/RUNOFF record formats
TCXINI -- Index Header record

F 3
15-Sep-1984 23:07:40
15-Sep-1984 22:51:29

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]FLIPRECS.REQ;1 Page 66 (9)

%sbttl 'TCXINI -- Index Header record';

\$FIELD

\$FLIP\$TCXINI_FIELDS = SET

TCXINI_CODE = [\$TINY INTEGER],

! record type

TCXINI_HEADER = [\$INTEGER]

! TCX format indicator

TES;

LITERAL

FLIP\$K_TCXINI_LENGTH = \$FIELD SET SIZE, ! Size in FULLWORDS

FLIP\$K_TCXINI_SIZE = %UPVAL*\$FIELD_SET_SIZE; ! Size in UNITS

MACRO

\$FLIP_TCXINI = BLOCK[FLIP\$K_TCXINI_LENGTH] FIELD(\$FLIP\$TCXINI_FIELDS)%;

FLIPRECS -- FLIP/RUNOFF record formats
TCXTXT -- Index TEXT record

G 3
15-Sep-1984 23:07:40
15-Sep-1984 22:51:29

VAX-11 Bliss-32 V4.0-742 Page 67
_S255SDUA28:[RUNOFF.SRC]FLIPRECS.REQ;1 (10)

```

R1657 0 %sbttl 'TCXTXT -- Index TEXT record';
R1658 0
R1659 0 $FIELD
R1660 0   $FLIP$TCXTXT_FIELDS1 = SET
R1661 0     TCXTXT_CODE = [$TINY_INTEGER], ! record type
R1662 0     $ALIGN(FULLWORD)
R1663 0     TCXTXT_ENTRY = [$INTEGER], ! ENTRY flag
R1664 0     TCXTXT_LENGTH = [$INTEGER], ! length of data
R1665 0     TCXTXT_XTN = [$INTEGER], ! transaction number
R1666 0     TCXTXT_BAR = [$INTEGER] ! change bar flag
R1667 0   TES;
R1668 0
R1669 0 LITERAL
R1670 0   FLIP$K_TCXTXT_BASELEN = $FIELD SET SIZE, ! Size in FULLWORDS
R1671 0   FLIP$K_TCXTXT_BASESIZ = %UPVAL*$FIELD_SET_SIZE; ! Size in UNITS
R1672 0
R1673 0 $FIELD
R1674 0   $FLIP$TCXTXT_FIELDS2 = SET
R1675 0     TCXTXT_DUMMY = [$SUB_BLOCK(FLIP$K_TCXTXT_BASELEN)],
R1676 0     TCXTXT_TEXT = [$SUB_BLOCK(1000)] ! text of entry
R1677 0   TES;
R1678 0
R1679 0 LITERAL
R1680 0   FLIP$K_TCXTXT_LENGTH = $FIELD SET SIZE, ! Size in FULLWORDS
R1681 0   FLIP$K_TCXTXT_SIZE = %UPVAL*$FIELD_SET_SIZE; ! Size in UNITS
R1682 0
R1683 0 MACRO
MR1684 0   $FLIP_TCXTXT = BLOCK[FLIP$K_TCXTXT_LENGTH] FIELD($FLIP$TCXTXT_FIELDS1,
R1685 0     $FLIP$TCXTXT_FIELDS2)%;
```

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

H 3
15-Sep-1984 23:07:40
15-Sep-1984 22:51:29

VAX-11 Bliss-32 V4.0-742 Page 68
_S255SDUA28:[RUNOFF.SRC]FLIPRECS.REQ;1 (11)

```
: R1686 0 %sbttl 'TOCHL -- HL indicator record';
: R1687 0
: R1688 0 SF ELD
: R1689 0 $FLIP$TOCHL_FIELDS = SET
: R1690 0 TOCHL_CODE = [$TINY_INTEGER] ! record type
: R1691 0 TES;
: R1692 0
: R1693 0 LITERAL
: R1694 0 FLIP$K_TOCHL_LENGTH = $FIELD SET SIZE; ! Size in FULLWORDS
: R1695 0 FLIP$K_TOCHL_SIZE = %UPVAL*$FIELD_SET_SIZE; ! Size in UNITS
: R1696 0
: R1697 0 MACRO
: R1698 0 $FLIP_TOCHL = BLOCK[FLIP$K_TOCHL_LENGTH] FIELD($FLIP$TOCHL_FIELDS)%;
```

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

1 3
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742 Page 69
_S255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 (2)

; 1699 0 REQUIRE 'REQ:FNCT.REQ'; ! Footnote control table

```

♦♦
FACILITY:      DSR (Digital Standard RUNOFF) / DSRPLUS
ABSTRACT:      Footnote control table.
ENVIRONMENT:    Transportable BLISS
AUTHOR:         Rich Friday      CREATION DATE:  1978

```

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

K 3
15-Sep-1984 23:07:40
15-Sep-1984 22:51:35

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]FNCT.REQ;1

Page 71
(2)

R1736 0
R1737 0
R1738 0
R1739 0
R1740 0
R1741 0
R1742 0
R1743 0
R1744 0
R1745 0
R1746 0
R1747 0
R1748 0
R1749 0
R1750 0
R1751 0
R1752 0

MODIFIED BY:

004 RER00004 Ron Randall 05-Apr-1983
For DSRPLUS: For footnote numbering, added
fnct_first_line and fnct_number_l/r.

003 RER00003 Ron Randall 27-Mar-1983
For DSRPLUS:
Added fnct_numbering and fnct_number to indicate numbering
of footnotes and to hold the number of the current footnote
on this page.

002 KAD00002 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.

--

MACRO

```

Number of unexpanded footnotes waiting to be output.
fnct_count      = fnct [0] %,
Number of unexpanded footnotes on or before current page.
fnct_ready      = fnct [1] %,
The 'n' from .FOOTNOTE n (zero if not given).
fnct_n          = fnct [2] %,
Number of expanded footnotes present in these tables.
fnct_old        = fnct [3] %,
This many footnotes are attached to lines not yet output.
fnct_waiting    = fnct [4] %,
TRUE between .FOOTNOTE and .END FOOTNOTE.
fnct_collecting = fnct [5] %,
TRUE if putting a footnote out onto a page.
fnct_expanding  = fnct [6] %,
TRUE if numbering footnotes.
fnct_numbering  = fnct [7] %,
TRUE if building first line of a numbered footnote.
fnct_first_line = fnct [8] %,
Left digit of the current footnote in this chapter.
fnct_number_l   = fnct [9] %,
Right digit of the current footnote in this chapter.
fnct_number_r   = fnct [10] %,
Current footnote in this chapter.
fnct_number     = fnct [11] %;
```

LITERAL

```

Number of words of control information in these tables.
fnct_control    = 12,
Maximum number of footnotes that can be noted in these tables.
```

```

R1810 0
R1811 00
R1812 00
R1813 00
R1814 00
R1815 00
R1816 00
R1817 00
R1818 00
R1819 00
R1820 00
R1821 00
R1822 00
R1823 00
R1824 00
R1825 00
R1826 00
R1827 00
R1828 00
R1829 00
R1830 00
R1831 00
R1832 00
R1833 00
R1834 0

      |
      |fnct_max          = 20;
      |
MACRO
      |
      | All footnote control information saved in this vector.
      |fnct_definition = VECTOR [fnct_control] %;
      |
MACRO
      |
      | Sizes of individual footnotes. There are .fnct_count + .fnct_old
      | entries, of which only the last .fnct_count are useful; of those,
      | it's ok to output at most .fnct_ready of them right now.
      | (The extra position allocated as a one-word work area.)
      |fn_ext_size_definition = VECTOR [fnct_max + 1] %;
      |
MACRO
      |
      | Number of TSF/MRA pairs in each saved footnote.
      |fn_int_size_definition = VECTOR [fnct_max + 1] %;
      |
      | End of fnct.REQ
```

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

N 3
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]DSRLIB.REQ;1

Page 74
(2)

; 1835 0 REQUIRE 'REQ:FOOREC.REQ'; ! FOOREC_... items (for FN record headers)

Version: 'V04-000'

```
*****
*
*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
*  ALL RIGHTS RESERVED.
*
*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
*  ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
*  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
*  TRANSFERRED.
*
*  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
*  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
*  CORPORATION.
*
*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*
*****
```

++
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
FOOREC.REQ defines the format of record headers for records written during footnote processing to the footnote temporary files, 00XRNO.TMP. Each record header gives some cursory information about the record that follows it. Such records are, typically, a TSF, an MRA, or 'pass-through' information intended for indexing or table of contents.

Note that FOOREC_ADDRESS, although allocated as part of FOOREC, is never read or written. Instead, FOO_PREAD, on reading a 'pass-through' record, returns the address of the information there. FOO_PWRITE uses that to determine where the information to be written is stored.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1982

MODIFIED BY:

002 KAD00002 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, ids, copyright dates. Changed require files to BLISS library.

--

FLIPRECS -- FLIP/RUNOFF record formats
10CHL -- HL indicator record

C 4
15-Sep-1984 23:07:40 VAX-11 Bliss-32 V4.0-742 Page 76
15-Sep-1984 22:51:47 _\$255\$DUA28:[RUNOFF.SRC]FOOREC.REQ;1 (1)

```

: R1893 0
: R1894 0
: R1895 0
: R1896 0
: R1897 0
: R1898 0
: R1899 0
: R1900 0
: R1901 0
: R1902 0
: R1903 0
: R1904 0
: R1905 0
: R1906 0
: R1907 0
: R1908 0
: R1909 0
: R1910 0
: R1911 0
: R1912 0
: R1913 0
: R1914 0
: R1915 0
: R1916 0
: R1917 0
: R1918 0
: R1919 0
: R1920 0
: R1921 0

MACRO
    FOOREC_MAJOR_TYPE = FOOREC [0]%,
    FOOREC_MINOR_TYPE = FOOREC [1]%,
    FOOREC_RECORD_SIZE = FOOREC [2]%,
    FOOREC_XTN_PTR = FOOREC [3]%,
    FOOREC_ADDRESS = FOOREC [4]%;

LITERAL
    FOOREC_SIZE = 4;

MACRO
    FOOREC_DEFINITION = VECTOR [FOOREC_SIZE + 1] %;

!Here are the major and minor record types.
LITERAL
    FOOREC_MAJ_TSF = 0,
    FOOREC_MAJ_MRA = 1,
    FOOREC_MAJ_PASS = 2,
    FOOREC_MIN_INDEX = 0,
    FOOREC_MIN_TOC = 1,
    FOOREC_MIN_TEXT = 2;

LITERAL
    FOOREC_MAX_MAJ = 2,
    FOOREC_MAX_MIN = 2;

!
    End of FOOREC.REQ

!The major record type (required information).
!The minor record type (optional information).
!Number of words in data record that follows (required information).
!If not zero, then it's the number of the word in the record where
! a transaction number is stored.
!Location of information read/written.

!Number of words in the record header.

!The record is a TSF data structure.
!The record is an MRA data structure.
!'Pass-through' information.
!Indexing information.
!Table of contents information.
!Something to do with normal text.

!The largest major record type.
!The largest minor record type.
```

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

D 4
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 77
(2)

: 1922 0 REQUIRE 'REQ:FRMSTK.REQ'; ! Codes for .LS & .NT context save stack

Version: 'V04-000'

```
*****
*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
*  ALL RIGHTS RESERVED.
*
*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
*  ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
*  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
*  TRANSFERRED.
*
*  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
*  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
*  CORPORATION.
*
*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*****
```

++
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
Definitions related to the data stack on which formatting information
is saved by the .NOTE and .LIST commands. Information is removed by
.END NOTE and .END LIST commands.

ENVIRONMENT: Compatible BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

003 KAD00003 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.

--
LITERAL FRMSTK_LIMIT = CL_DEFAULT_SIZE;
Maximum depth of the stack. It is 15 at
this point; but the actual value is kept
only in CLIST.REQ.
LITERAL FRMSTK_FILL = 01, ! A copy of SCA_FILL
FRMSTK_JUSTIFY = 02, ! A copy of SCA_JUSTIFY

```

R1980 0 FRMSTK_RM = 03, : A copy of SCA_RM
R1981 0 FRMSTK_LM = 04, : A copy of SCA_LM
R1982 0 FRMSTK_SPACING = 05, : A copy of SCA_SPACING
R1983 0 FRMSTK_COMMAND = 06, : The handler code for the command responsible for this entry
R1984 0 FRMSTK_ISEQN = 07, : The input sequence number for the command
R1985 0 FRMSTK_IPAGEN = 08, : The input page number for the command
R1986 0 FRMSTK_FSPECP = 09, : A reference to the file-spec in which the command occurred.
R1987 0 FRMSTK_FSPECC = 10, : The length of the file-spec in which the command occurred.
R1988 0 FRMSTK_REQ_D = 11, : The .REQUIRE nesting level in effect
R1989 0 FRMSTK_CROCK = 12, : A copy of SCA_CROCK
R1990 0 FRMSTK_DO_NBITS = 13, : A copy of SCA_DO_NBITS
R1991 0 FRMSTK_KER = 14, : A copy of SCA_KER
R1992 0 FRMSTK_INDEX = 15, : A copy of SCA_INDEX.
R1993 0
R1994 0 LITERAL
R1995 0 FRMSTK_ITEM_CNT = 15; : Number of pieces of info per entry
R1996 0
R1997 0 !One more entry is allocated than requested so than the routine
R1998 0 !LIT (process literals) can save information.
R1999 0 STRUCTURE
R2000 0 FORM_STACK[I,J;N=FRMSTK_ITEM_CNT,M=FRMSTK_LIMIT] =
R2001 0 [ %UPVAL*( N*(M + 1) ) ]
R2002 0 (FORM_STACK + %UPVAL*( (I - 1)*N + J - 1) );
R2003 0
R2004 0 !
                                End of FRMSTK.REQ

```

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

G 4
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 80
(2)

; 2005 0 REQUIRE 'REQ:FSPACK.REQ'; ! FIXED_STRING structure & FS_... macros

Version: 'V04-000'

* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
* DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
* ALL RIGHTS RESERVED.

* THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
* ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
* INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
* COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
* OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
* TRANSFERRED.

* THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
* AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
* CORPORATION.

* DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
* SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.

++
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
Macros to manipulate FIXED_STRINGS: transportable, fixed-length
strings.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

002 KAD00002 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.

--
+
FIXED STRING is a structure that contains a string of an expected maximum
length, plus additional locations to contain information related to the
status of the string.

-
STRUCTURE
fixed_string[i;n=1] =
[4*%UPVAL + (%\$ALLOCATION(N*%UPVAL))
(fixed_string - %UPVAL*(1 - I))];

R2063 0
R2064 0
R2065 0
R2066 0
R2067 0
R2068 0
R2069 0
R2070 0
R2071 0
R2072 0
R2073 0
R2074 0
R2075 0
R2076 0
MR2077 0
MR2078 0
MR2079 0
MR2080 0
MR2081 0
MR2082 0
R2083 0
R2084 0
R2085 0
R2086 0
R2087 0
R2088 0
MR2089 0
MR2090 0
R2091 0
R2092 0
MR2093 0
MR2094 0
R2095 0
R2096 0
MR2097 0
MR2098 0
R2099 0
R2100 0
MR2101 0
MR2102 0
R2103 0
R2104 0
R2105 0
R2106 0
R2107 0
R2108 0
MR2109 0
MR2110 0
MR2111 0
MR2112 0
MR2113 0
MR2114 0
R2115 0
R2116 0
R2117 0
R2118 0
R2119 0

+ The following literals are names for the fields allocated above. These names are not to be used by a user.

LITERAL
FS_FCP = 01; CHSPTR to first character position.
FS_NCP = 02; CHSPTR to next character position.
FS_MAX = 03; Capacity of the counted string.
FS_LEN = 04; Current length.

+ FS_ALLOCATE is used to allocate and initialize a fixed-length string.

MACRO
fs_allocate (fs_name, fs_maxl) =
fs_name:fixed_string [fs_maxl]
INITIAL (0,
0,
fs_maxl,
0)
X;

+ Control information is accessed via the following macros.

MACRO
fs_start (fs_name) =
fs_name [fs_fcp]
X,
fs_next (fs_name) =
fs_name [fs_ncp]
X,
fs_maxsize (fs_name) =
fs_name [fs_max]
X,
fs_length (fs_name) =
fs_name [fs_len]
X;

+ FS_INIT initializes a fixed-length string to the null string.

MACRO
fs_init (fs_name) =
BEGIN
fs_length (fs_name) = 0;
fs_start (fs_name) = CHSPTR (fs_name [5]);
fs_next (fs_name) = .fs_start (fs_name);
END
X;

+ FS_WCHAR puts a character into the fixed-length string.


```

: R2120 0
: MR2121 00
: MR2122 00
: MR2123 00
: MR2124 00
: MR2125 00
: R2126 00
: R2127 00
: R2128 00
: R2129 00
: R2130 00
: R2131 00
: R2132 00
: MR2133 00
: MR2134 00
: MR2135 00
: MR2136 00
: MR2137 00
: R2138 00
: R2139 00
: R2140 0

```

```

MACRO
    fs_wchar (fs_name,khar)      =
        BEGIN
            CH$WCHAR_A (khar, fs_next (fs_name));      !Write character and advance pointer.
            fs_length (fs_name) = .fs_length (fs_name) + 1; !Bump total length count.
        END
    %;

!+
!- FS_RCHAR gets a character from the fixed-length string.
MACRO
    fs_rchar (fs_name,khar)      =
        BEGIN
            khar = CH$RCHAR_A (fs_next (fs_name));      !Read character and advance pointer.
            fs_length (fs_name) = .fs_length (fs_name) - 1; !Decrement remainder count.
        END
    %;

!
                                End of FSPACK.REQ

```

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

^{K 4}
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 84
(2)

; 2141 0 REQUIRE 'REQ:GCA.REQ'; ! GCA (General Control Array) definitions

GCA.REQ Definitions pertaining to the General Control Area (GCA)
IDENT 026

COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
ALL RIGHTS RESERVED.

THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
TRANSFERRED.

THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
CORPORATION.

DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.

FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
Definitions for the GCA (Global Control Area). Initialized by
DOOPTS from command-line information.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

026	REM00026	Ray Marshall	16-May-1983
	Added support for outputting output lines numbers by adding another macro: GCA_CMD_USQ		
025	REM00025	Ray Marshall	16-November-1983
	Added macros so that Ken's SAVRES module can load cells with them instead of using numeric offsets. They have the string "_f_" within them.		
024	KFA00024	Ken Alden	10-Oct-1983
	Put gca_cmd_pages in the right place.		
023	KFA00023	Ken Alden	06-Oct-1983
	Added gca_cmd_pages to signal the /pages qualifier.		

```

R2199 0      022   KFA00022   Ken Alden   27-Jul-1983
R2200 0      Added gca_flag_cmd to SAVE list.
R2201 0
R2202 0      021   KFA00021   Ken Alden   15-Jul-1983
R2203 0      Added gca_do_cont_already, gca_do_index_already.
R2204 0
R2205 0      020   KFA00020   Ken Alden   27-Jun-1983
R2206 0      Added gca_cref_errcnt to the top eight bits of black_box.
R2207 0
R2208 0      019   KFA00019   Ken Alden   13-Jun-1983
R2209 0      Made use of GCA[45] for flaging /down line skipping. Used in
R2210 0      TOPPAG and USKIPL.
R2211 0
R2212 0      018   KAD00018   Keith Dawson 12-May-1983
R2213 0      Use 16 bits each for page, index, contents, cref counts.
R2214 0
R2215 0      017   KAD00017   Keith Dawson 21-Mar-1983
R2216 0      Add bits for LNO1 output options.
R2217 0
R2218 0      016   KFA00016   Ken Alden   16-Mar-1983
R2219 0      Save/restore now permitted in DSR.
R2220 0
R2221 0      015   KAD00015   Keith Dawson 07-Mar-1983
R2222 0      Global edit of all modules. Updated module names, idents,
R2223 0      copyright dates. Changed require files to BLISS library.
R2224 0
R2225 0
R2226 0
R2227 0
R2228 0
R2229 0
R2230 0
R2231 0
R2232 0
R2233 0
R2234 0
R2235 0
R2236 0
R2237 0
R2238 0
R2239 0
R2240 0
R2241 0
R2242 0
R2243 0
R2244 0
R2245 0
R2246 0
R2247 0
R2248 0
R2249 0
R2250 0
R2251 0
R2252 0
R2253 0
R2254 0
R2255 0

```

MACRO

```

gca_com_start      = GCA[ 00 ]%, !A CH$PTR to the first character of the
                    !current command (usually it's a '.')
gca_autopara       = .GCA[ 01 ]%, ! (SAVEALL)True if user said .AUTOPARAGRAPH
gca_f_autopara     = GCA[ 01 ]%,
gca_autosubt       = .GCA[ 02 ]%, ! (SAVEALL)True if user said .AUTOSUBTITLE
gca_f_autosubt     = GCA[ 02 ]%,
gca_autotabl       = .GCA[ 03 ]%, ! (SAVEALL)True if user said .AUTOTABLE
gca_f_autotabl     = GCA[ 03 ]%,
gca_autojust       = .GCA[ 04 ]%, ! (SAVEALL)True if user said .AUTOJUSTIFY
gca_f_autojust     = GCA[ 04 ]%,

gcaBars            = (GCA[05])<BAR->%, !GCA BARS ENAB & GCA BARS ON.
gcaBars_enab       = (GCA[06])<BAR->%, !Controlled by .ENAB[.]/.DISABLE BAR.
gcaBars_on         = (GCA[07])<BAR->%, !Controlled by .BEGIN/.END BAR.
gcaEverBars        = (GCA[08])<BAR->%, !True if change bars ever enabled.
gcaDraft_f         = GCA[ 09 ]%, !If user said /DEBUG, the character to be used as draft flag (from .VARIABLE
gca_chapt          = GCA[ 10 ]%, !True if document contains chapters/appendices
gca_twidht_36      = GCA[ 11 ]%, !TOPS-20 terminal wrap width (DSRPLUS only).
gca_concat         = GCA[ 12 ]%, !True if .NO SPACE is pending.
gca_cmd_msg        = GCA[ 13 ]%, !Routing code for error messages
gca_lit_count      = GCA[ 14 ]%, !If a counted literal, the # of lines.
gca_pchax          = GCA[ 15 ]%, !True if a .NUMBER CHAPTER or .NUMBER APPENDIX command has already set up NP
gca_tescape_36     = GCA[ 16 ]%, !TOPS-20 terminal escape characteristics (DSRPLUS only)

gcaCmdNbts         = GCA[ 17 ]%, !Ultimate controls for miscellaneous functions.
gcaLitFlag         = GCA[ 18 ]%, !status of .GCA_FLAG_CMD during literal processing.
gcaCmdLstbts       = GCA[ 19 ]%, !Ultimate controls for misc functions.
gcaLiteral         = GCA[ 20 ]%, !True between .LITERAL and .END LITERAL

```

```

R2256 0 gca_xcase = GCA[ 21 ]%, !(SAVEALL)Case rules for index entries.
R2257 0 gca_f_xcase = GCA[ 21 ]%,
R2258 0
R2259 0 gca_page_cnt = GCA[ 22 ]%, !Number of pages generated so far.
R2260 0 gca_contents_cnt = GCA[ 23 ]%, !Number of table-of-contents entries written to the .BRN file.
R2261 0 gca_index_cnt = GCA[ 24 ]%, !Number of index entries written to the .BRN file.
R2262 0 gca_old_cref_cnt = GCA[ 25 ]%, !Number of cross-reference entries read from the old .BRN file.
R2263 0 gca_new_cref_cnt = GCA[ 26 ]%, !Number of cross-reference entries written to the .BRN file.
R2264 0
R2265 0 gca_orange_cnt = GCA[ 27 ]%, !Count of number of page ranges specified on /PAGE_RANGE switch.
R2266 0 gca_skip_out = GCA[ 28 ]%, !True if skipping output because of a /PAGE_RANGE specification.
R2267 0 gca_debug_index = (GCA[29])<0,1>%, !True if debugging the index.
R2268 0 gca_debug_toc = (GCA[29])<1,1>%, !True if debugging the table of contents.
R2269 0 gca_debug_cnd = (GCA[29])<2,1>%, !True if debugging conditionals (.IF, etc.).
R2270 0 gca_debug_fil = (GCA[29])<3,1>%, !True if want file names listed.
R2271 0 gca_debug_cref = (GCA[29])<4,1>%, !True if want cross-reference errors flagged inline.
R2272 0 gca_debug_save = (GCA[29])<5,1>%, !True if want save/restore information echoed.
R2273 0 gca_max_astn = GCA[ 30 ]%, !Result of last .AUTOSUBTITLE command. Remembered during .NO AUTOSUBTITLE
R2274 0 gca_btc = (GCA[31])<0,1>%, !True if a binary table of contents is wanted.
R2275 0 gca_cmd_btc = (GCA[31])<1,1>%, !True iff user said /INTERMEDIATE.
R2276 0 gca_bix = (GCA[31])<2,1>%, !True if a binary index is wanted.
R2277 0
R2278 0 gca_case = GCA[ 32 ]%, !(SAVEALL)Set by .UPPER/LOWER CASE
R2279 0 gca_f_case = GCA[ 32 ]%,
R2280 0 gca_flag_cmd = GCA[ 33 ]%, !(SAVE)Last .FLAGS ALL/.NO FLAGS ALL command
R2281 0 gca_f_flag_cmd = GCA[ 33 ]%,
R2282 0
R2283 0 gca_pwidth = GCA[ 34 ]%, !Physical page width
R2284 0
R2285 0 gca_lwidth = GCA[ 35 ]%, !(SAVE)Logical page width
R2286 0 gca_f_lwidth = GCA[ 35 ]%,
R2287 0
R2288 0 gca_clit = GCA[ 36 ]%, !True for counted literals.
R2289 0 gca_note_prim = GCA[ 37 ]%, !Primary margin adjust for .NOTE
R2290 0 gca_note_alt = GCA[ 38 ]%, !Alternate margin adjust for .NOTE
R2291 0 gca_skipping = (GCA[39])<0,1>%, !True if in the FALSE branch of an .IF command.
R2292 0 gca_nia = GCA[ 40 ]%, !Count of attempted negative indents.
R2293 0 gca_xmarg = GCA[ 41 ]%, !Count of crossed margin attempts.
R2294 0 gca_normal_xtn = GCA[ 42 ]%, !Next transaction number for index entry NOT in a footnote.
R2295 0 gca_foot_xtn = GCA[ 43 ]%, !Next transaction number for index entry in a footnote.
R2296 0 gca_index_fmt = GCA[ 44 ]%, !If True, generate dots in index. (Not currently set anywhere in the code.)
R2297 0 gca_down_flag = (GCA[45])<0,1>%, !True if the unconditional lines are for /down.
R2298 0 gca_max_require = GCA[ 46 ]%, !Same as MAX REQUIRE.
R2299 0 gca_req_depth = GCA[ 47 ]%, !Current depth of .REQUIRE (usually 0, i.e., not a .REQUIRE file).
R2300 0 gca Fehler = GCA[ 48 ]%, !True if any errors have been found.
R2301 0 gca_errcnt = GCA[ 49 ]%, !Count of lines of error messages.
R2302 0 gca_err_dir = GCA[ 50 ]%, !Indicates where errors are to be reported.
R2303 0
R2304 0 gca_keep = GCA[ 51 ]%, !(SAVE)True if user said .KEEP.
R2305 0 gca_f_keep = GCA[ 51 ]%,
R2306 0
R2307 0 gca_io_flags = GCA[ 52 ]%, !General I/O control flags.
R2308 0 gca_cmd_quick = (GCA[52])<0,1>%, !True if /QUICK or /NOOUTPUT.
R2309 0 termination_log = (GCA[52])<1,1>%, !True if /LOG.
R2310 0 gca_flip = (GCA[52])<2,1>%, !True if /DEC=FLIP.
R2311 0 gca_s_output = (GCA[52])<3,1>%, !True if /OUTPUT was explicitly specified.
R2312 0 gca_op_dev = (GCA[52])<4,4>%, !Type of output device (see OPDEV.REQ).

```

```

R2313 0
R2314 0 gca_ln01_ital_under = (GCA[52])<8,1>%, ! For LN01 output: set=italics, clear=underlining.
R2315 0 gca_ln01_port_land = (GCA[52])<9,1>%, ! For LN01 output: set=portrait, clear=landscape.
R2316 0 gca_cmd_pages = (GCA[52])<10,1>%, ! True if /PAGES.
R2317 0
R2318 0 gca_diag1 = GCA[ 53 ]%, ! First 16 diagnostic control flags.
R2319 0 gca_diag2 = GCA[ 54 ]%, ! Second 16 diagnostic control flags.
R2320 0
R2321 0 gca_xp_ever = GCA[ 55 ]%, ! True if user gave any .XP/.YP commands since last .DX or .PX.
R2322 0 gca_line_pend = GCA[ 56 ]%, ! Used for OUTHDR in determining if the header has been processed and output.
R2323 0
R2324 0 gca_black_box = GCA[ 57 ]%, ! True if user said /AUTOMATIC.
R2325 0 gca_cref_errcnt = (GCA[57])<8,8>%, ! Number of unresolved cross references.
R2326 0 gca_cross_reference = (GCA[58])<0,1>%, ! True if user said /CROSS_REFERENCE (it's the default).
R2327 0 gca_expand_cref = (GCA[58])<1,1>%, ! True if cross references should be expanded.
R2328 0 gca_old_brn_exists = (GCA[58])<2,1>%, ! True if an old .BRN file exists and was read.
R2329 0 gca_cref_changed = (GCA[58])<3,1>%, ! True if any cross-reference changed in the course of this run.
R2330 0 gca_do_cont_already = (GCA[58])<4,1>%, ! True if a do contents has been processed in this run.
R2331 0 gca_do_index_already = (GCA[58])<5,1>%, ! True if a do index has been processed in this run.
R2332 0 gca_rerun_count = (GCA[59])<0,8>%, ! Number of times DSRPLUS must be rerun for complete and correct /AUTOMATI
R2333 0 gca_pass_count = (GCA[59])<8,8>%, ! Number of the current /AUTOMATIC rerun pass.
R2334 0
R2335 0 LITERAL
R2336 0 gca_size = 64; ! Number of cells in GCA. As of version V04-000 there are
R2337 0 ! 5 free cells.
R2338 0
R2339 0 !The following literals define where errors are to be reported
R2340 0 !NOTE: The bit representation of these literals is used by DOOPTS.
R2341 0 LITERAL
R2342 0 report_err_none = 0, !Report no error messages
R2343 0 report_err_file = 1, !Report in output file only.
R2344 0 report_err_std = 2, !Report on standard error log only.
R2345 0 report_err_both = 3; !Report errors in both output file and on standard error device.
R2346 0
R2347 0 !Definition of diagnostic control flags. The names may be later changed,
R2348 0 !but for now, these names will at least provide easy access for initial use.
R2349 0 MACRO
R2350 0 diag1_0 = (GCA_DIAG1)<0,1>%,
R2351 0 diag1_1 = (GCA_DIAG1)<1,1>%,
R2352 0 diag1_2 = (GCA_DIAG1)<2,1>%,
R2353 0 diag1_3 = (GCA_DIAG1)<3,1>%,
R2354 0 diag1_4 = (GCA_DIAG1)<4,1>%,
R2355 0 diag1_5 = (GCA_DIAG1)<5,1>%,
R2356 0 diag1_6 = (GCA_DIAG1)<6,1>%,
R2357 0 diag1_7 = (GCA_DIAG1)<7,1>%,
R2358 0 diag1_8 = (GCA_DIAG1)<8,1>%,
R2359 0 diag1_9 = (GCA_DIAG1)<9,1>%,
R2360 0 diag1_10 = (GCA_DIAG1)<10,1>%,
R2361 0 diag1_11 = (GCA_DIAG1)<11,1>%,
R2362 0 diag1_12 = (GCA_DIAG1)<12,1>%,
R2363 0 diag1_13 = (GCA_DIAG1)<13,1>%,
R2364 0 diag1_14 = (GCA_DIAG1)<14,1>%,
R2365 0 diag1_15 = (GCA_DIAG1)<15,1>%;
R2366 0
R2367 0 MACRO
R2368 0 diag2_0 = (GCA_DIAG2)<0,1>%,
R2369 0 diag2_1 = (GCA_DIAG2)<1,1>%,

```

```

R2370 0      diag2_2 = (GCA_DIAG2)<2,1>%
R2371 0      diag2_3 = (GCA_DIAG2)<3,1>%
R2372 0      diag2_4 = (GCA_DIAG2)<4,1>%
R2373 0      diag2_5 = (GCA_DIAG2)<5,1>%
R2374 0      diag2_6 = (GCA_DIAG2)<6,1>%
R2375 0      diag2_7 = (GCA_DIAG2)<7,1>%
R2376 0      diag2_8 = (GCA_DIAG2)<8,1>%
R2377 0      diag2_9 = (GCA_DIAG2)<9,1>%
R2378 0      diag2_10 = (GCA_DIAG2)<10,1>%
R2379 0      diag2_11 = (GCA_DIAG2)<11,1>%
R2380 0      diag2_12 = (GCA_DIAG2)<12,1>%
R2381 0      diag2_13 = (GCA_DIAG2)<13,1>%
R2382 0      diag2_14 = (GCA_DIAG2)<14,1>%
R2383 0      diag2_15 = (GCA_DIAG2)<15,1>%
R2384 0
R2385 0
R2386 0
R2387 0
R2388 0
R2389 0
R2390 0
R2391 0
R2392 0
R2393 0
R2394 0
R2395 0
R2396 0
MR2397 0
MR2398 0
R2399 0

```

MACRO

```

!      The following are true if user:
gca_cmd_bar = (GCA_CMD_LSTBTS)<BAR_-->%      did not forbid change bars on the command line.
gca_cmd_isq = (GCA_CMD_LSTBTS)<ISQ_-->%      requested input sequence numbers.
gca_cmd_osq = (GCA_CMD_LSTBTS)<OSQ_-->%      requested output line numbers.
gca_cmd_rit = (GCA_CMD_LSTBTS)<RIT_-->%      said /RIGHT.
gca_cmd_und = (GCA_CMD_NBITS)<UND_-->%      said /UNDERLINING.
gca_cmd_bld = (GCA_CMD_NBITS)<BLD_-->%      said /BOLDING.
gca_cmd_ovr = (GCA_CMD_NBITS)<OVR_-->%      said /OVERSTRIKING.
gca_cmd_ind = (GCA_CMD_NBITS)<IND_-->%      said /INDEXING.

```

MACRO

```

gca_definition =
VECTOR [gca_size]
%

```

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

D 5
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255\$DUA28:[RUNOFF.SPC]DSRLIB.REQ;1 Page 90
(2)

; 2400 0 REQUIRE 'REQ:GETQSC.REQ'; ! GETQ_... Completion codes ;

Version: 'V04-000'

* .COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
* DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
* ALL RIGHTS RESERVED.

* THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
* ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
* INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
* COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
* OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
* TRANSFERRED.

* THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
* AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
* CORPORATION.

* DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
* SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.

++
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
Completion codes returned by GETQS

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

002 KAD00002 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.

--
LITERAL

GETQS_NORMAL = 0, !Everything went ok.
GETQS_BAD = 1, !Quoted string ill-formed, etc.
GETQS_TOO_LONG = 2, !Too many characters.
GETQS_NONE = 3, !There was no string to get.

End of GETQSC.REQ

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

F 5
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 92
(2)

: 2455 0 REQUIRE 'REQ:GNCC.REQ'; ! Completion codes returned by GNAME.

Version: 'V04-000'

```
*****
*
*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
*  ALL RIGHTS RESERVED.
*
*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
*  ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
*  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
*  TRANSFERRED.
*
*  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
*  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
*  CORPORATION.
*
*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*****
```

++
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
Completion codes returned by GNAME.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

002 KAD00002 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.

--
LITERAL

GNAME_NORMAL = 01; ! All went well.
GNAME_NO_NAME = 02; ! Illegally formed or missing name.
GNAME_TOO_LONG = 03; ! Excess characters have been dropped.

LITERAL

GNAME_CC_COUNT = 03; ! Number of condition codes returned
! by GNAME.

! End of GNCC.REQ

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

H 5
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 94
(2)

: 2513 0 REQUIRE 'REQ:GSLUCC.REQ'; ! GSLU_... Completion codes

Version: 'V04-000'

```
*****
*
*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
*  ALL RIGHTS RESERVED.
*
*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
*  ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
*  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
*  TRANSFERRED.
*
*  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
*  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
*  CORPORATION.
*
*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*****
```

++
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
Completion codes returned by GSLU.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

002 KAD00002 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.

--
LITERAL

GSLU_NORMAL = 01; ! All went well.
GSLU_NONE = 02; ! Missing string.
GSLU_TOO_LONG = 03; ! Excess characters have been dropped.

LITERAL

GSLU_CC_COUNT = 03; ! Number of condition codes returned
by GSLU.

! End of GSLUCC.REQ

FLIPRFS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

J 5
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 96
(2)

: 2571 0
: U 2572 0
: U 2573 0
: 2574 0
: 2575 0
: 2576 0

%IF DSRPLUS %THEN
REQUIRE 'REQ:GTOKCC.REQ'; ! GT_... Completion codes
%FI
REQUIRE 'REQ:HCT.REQ'; ! HCT_... (Heading Control Table) & LAYOUT_...

HCT.REQ Definitions for Header Control Tables

Version: 'V04-000'

```
*****
*
*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
*  ALL RIGHTS RESERVED.
*
*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
*  ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
*  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
*  TRANSFERRED.
*
*  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
*  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
*  CORPORATION.
*
*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*****
```

```
++
FACILITY:      DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
  Definitions pertaining to tables that define how headings, etc.
  are to appear.

ENVIRONMENT:   Transportable BLISS

AUTHOR:        Rich Friday

CREATION DATE: 16-October-1980
```

MODIFIED BY:

006 KFA00006 Ken Alden 10-Jul-1984
Number_page and NMPG_NP are now part of SAVE (not saveall).
005 REM00005 Ray Marshall 16-November-1983
Added macros so that Ken's SAVRES module can load cells with
them instead of using numeric offsets. They have the string
"_f_" within them.
004 KFA00004 Ken Alden 16-Mar-1983
SAVE/RESTORE now enabled for DSR
003 KAD00003 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.

MACRO

HCT_FIRST_TITLE = HCT[0]%, ! True if headings wanted on ALL pages.
HCT_DATE = .HCT[1]%, ! (SAVEALL)True if the date is wanted in the subtitle.
HCT_f DATE = HCT[1]%,
HCT_HEADERS = .HCT[2]%, ! (SAVEALL)True if headers are wanted.
HCT_f HEADERS = HCT[2]%,
HCT_NUMBER_PAGE = .HCT[3]%, ! (SAVE)True if pages are to be numbered.
HCT_f_NUMBER_PAGE = HCT[3]%,
HCT_ODD_EVEN = HCT[4]%, ! "ODD" or "EVEN"-ness of page.
HCT_HD CASE = .HCT[5]%, ! (SAVEALL)Case rules for the words PAGE/INDEX
HCT_f HD CASE = HCT[5]%,
HCT_SUBTITLE = .HCT[6]%, ! (SAVEALL)TRUE if subtitles wanted.
HCT_f_SUBTITLE = HCT[6]%,
HCT_LAYOUT = HCT[7]%, ! The page layout to be used (see below)
HCT_LAYOUTN = HCT[8]%, ! Blank lines between text and page number at bottom.
HCT_LAYOUT NP = HCT[9]%, ! The page layout to be used on the next page.
HCT_LAYOUTN_NP = HCT[10]%, ! Same as HCT_LAYOUTN, but for next page.
HCT_NMPG_NP = .HCT[11]%, ! (SAVE)True if pages are to be numbered on the next page.
HCT_f_NMPG_NP = HCT[11]%

%IF DSRPLUS %THEN
HCT_TITLE_ALWAYS= HCT[12]% ! True if titles wanted on ALL pages, including chapter pages.

%FI ;

LITERAL

%IF DSRPLUS %THEN

HCT_SIZE = 13;

%ELSE

HCT_SIZE = 12;

%FI

LITERAL

! Case rules for words PAGE and INDEX

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

M 5
15-Sep-1984 23:07:40
15-Sep-1984 22:52:18

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]HCT.REQ;1

Page 99
(2)

.. R2674 0
.. R2675 0
.. R2676 0
.. R2677 0
.. R2678 0
.. R2679 0
.. R2680 0
.. R2681 0
.. R2682 0
.. R2683 0
.. R2684 0
.. R2685 0
.. R2686 0
.. MR2687 0
.. R2688 0

HCT_HD_LOWER = 0,
HCT_HD_UPPER = 1,
HCT_HD_MIXED = 2;

LITERAL

LAYOUT_STANDARD = 0,
LAYOUT_CENTERED = 1,
LAYOUT_FLIP_ODD = 2,
LAYOUT_RUN_BOTC = 3;

MACRO

HCT_DEFINITION =
VECTOR[HCT_SIZE]%;

! .HEADERS LOWER
! .HEADERS UPPER
! .HEADERS MIXED

! Names for page layouts

! Standard RUNOFF

! Title, subtitle centered at top, page number at bottom.

! Page number at bottom. Flip title, subtitle at top.

! Start with titles right if odd page.

! Same as LAYOUT_STANDARD, but include the running page
! number centered at the bottom of the page.

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

N 5
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 100
(2)

; 2689 0 REQUIRE 'REQ:HLC.REQ'; ! HLC_... (Header Level Control) area items

R2690 0
R2691 0
R2692 0
R2693 0
R2694 0
R2695 0
R2696 0
R2697 0
R2698 0
R2699 0
R2700 0
R2701 0
R2702 0
R2703 0
R2704 0
R2705 0
R2706 0
R2707 0
R2708 0
R2709 0
R2710 0
R2711 0
R2712 0
R2713 0
R2714 0
R2715 0
R2716 0
R2717 0
R2718 0
R2719 0
R2720 0
R2721 0
R2722 0
R2723 0
R2724 0
R2725 0
R2726 0
R2727 0
R2728 0
R2729 0
R2730 0
R2731 0
R2732 0
R2733 0
R2734 0
R2735 0
R2736 0
R2737 0
MR2738 0
MR2739 0
R2740 0
MR2741 0
MR2742 0
MR2743 0
R2744 0
MR2745 0
MR2746 0

Version: 'V04-000'

```
*****
*
*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
*  ALL RIGHTS RESERVED.
*
*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
*  ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
*  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
*  TRANSFERRED.
*
*  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
*  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
*  CORPORATION.
*
*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*
*****
```

++
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS
ABSTRACT: Definitions relating to the HLC (Header Level Control area).

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

002 KAD00002 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.

--

MACRO

HLC_UPPER	= HLC[0]	!Maximum .HL number for which entire text !is to be in upper case.
HLC_CAP	= HLC[1]	!Maximum .HL number for which to capitalize !first character of each word and leave !others alone.
HLC_RUNON	= HLC[2]	!Smallest .HL number for which to generate !'-' and leave no break before next text line.

```

R2747 0
MR2748 0      HLC_CO_NBITS      = HLC[3]      !Control carry-over of underlining/bolding/overstriking
MR2749 0      !from .HL to subtitle.
R2750 0
MR2751 0      HLC_HEADLC      = HLC[4]      !Leave this many blank lines after the header.
R2752 0
MR2753 0      HLC_HEADLT      = HLC[5]      !Anticipate this many lines (include in test page).
R2754 0
MR2755 0      HLC_HEADLB      = HLC[6]      !Skip this many lines before the header.
R2756 0
MR2757 0      HLC_NO_NUMBER    = HLC[7]      !Smallest .HL number for which to leave the header
MR2758 0      !unnumbered.
R2759 0
MR2760 0      HLC_HEADSP      = HLC[8]      !Number of spaces after the section number.
R2761 0
MR2762 0      HLC_CENTER      = HLC[9]      !Smallest .HL number for which to center the header
R2763 0      ! (if header is not run-in).
R2764 0
R2765 0      LITERAL
R2766 0      HLC_SIZE          = 10;          !Number of cells in the HLC.
R2767 0
R2768 0      MACRO
MR2769 0      HLC_CO_BLD      = (HLC_CO_NBITS)<BLD__> !Carry over bolding to subtitles.
R2770 0
MR2771 0      HLC_CO_UND      = (HLC_CO_NBITS)<UND__> !Carry over underlining to subtitles.
R2772 0
MR2773 0      HLC_CO_OVR      = (HLC_CO_NBITS)<OVR__> !Carry over overstriking to subtitles.
R2774 0
R2775 0
R2776 0      MACRO
MR2777 0      HLC_DEFINITION    =
R2778 0      VECTOR[HLC_SIZE]%;
R2779 0
R2780 0      !
End of HLC.REQ

```

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

D 6
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]DSRLIB.REQ;1
Page 103
(2)

: 2781 0 REQUIRE 'REQ:IFSTK.REQ'; ! IFSTK_... stack for nested .Ifs

Version: 'V04-000'

```
*****
*
*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
*  ALL RIGHTS RESERVED.
*
*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
*  ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
*  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
*  TRANSFERRED.
*
*  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
*  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
*  CORPORATION.
*
*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*****
```

++
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
Definitions related to the IF stack, for nested .IF commands.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

002 KAD00002 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.

--
LITERAL

IFSTK_SIZE = 10,	! Up to 10 levels of .IFs.
IFSTK_DEPTH = -1,	! Index into the IFSTK where the current depth is saved.
IFSTK_VR = 0,	! Index to VRxxxx information.
IFSTK_BOOL = 1,	! Logical value in effect at this time.
IFSTK_SOURCE = 2,	! The handler code of the command that made this entry.
IFSTK_REQ D = 3,	! .REQUIRE depth at which .If must terminate.
IFSTK_IPAGEN = 4,	! Input file page number.
IFSTK_ISEQN = 5,	! Input file sequence number.
IFSTK_FLAG = 6,	! The /DRAFT flag that was interrupted.

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

F 6
15-Sep-1984 23:07:40
15-Sep-1984 22:52:26

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]IFSTK.REQ;1

Page 105
(1)

```
: R2839 0
: R2840 0
: R2841 0
: R2842 0
: R2843 0
: R2844 2
: R2845 2
: R2846 0
: R2847 0
: R2848 0
!
IFSTK_ELSE_FLG = 7; ! The /DRAFT flag for the .else branch.
STRUCTURE
  IFSTACK[I,J:N=IFSTK_SIZE] =
    [%UPVAL*( 8*N + 1 + 8 )] ! Leave room for the 0th nesting level.
    (IFSTACK + (If J eql IFSTK_DEPTH
      then 0
      else %UPVAL*(1 + 8*I + J) ) );
!
End of IFSTK.REQ
```

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

6
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 106
(2)

; 2849 0 REQUIRE 'REQ:INDEX.REQ'; ! Structures used by the indexing command

Version: 'V04-000'

```
*****
*
*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
*  ALL RIGHTS RESERVED.
*
*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
*  ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
*  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
*  TRANSFERRED.
*
*  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
*  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
*  CORPORATION.
*
*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*****
```

FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
Structures for use by the indexing command.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

002 KAD00002 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.

!IF

2*%BPADDR LEQ %BPVAL !Can addresses be packed in a word?

!THEN

! Structure of index entry (DECsystem-10/20).

MACRO

X_PREV	= 0,0,18,0 %	!Link to previous item	(HALF WORD)
X_NEXT	= 0,18,18,0 %	!Link to next item (0 ==> EOL)	(HALF WORD)
X_SUBX	= 1,0,18,0 %	!Sub index pointer	(HALF WORD)
X_SIBC	= 1,18,8,0 %	!Sub index level	(BYTE)
X_BARS	= 1,26,1,0 %	!Change bar flag	(BIT)

```

UR2907 0      X_REF      = 2,0,18,0 %;      !Extra reference pointer      (HALF WORD)
UR2908 0      X_TEXT     = 2,18,18,0 %;      !Pointer to text of index item (HALF WORD)
UR2909 0
UR2910 0      LITERAL
UR2911 0      X_ENTRY    = 3;                !Number of words in index entry.
UR2912 0
UR2913 0      ! Structure of extra reference entry (DECsystem-10/20).
UR2914 0      MACRO
UR2915 0      XX_LINK    = 0,0,18,0 %;      !Pointer to additional entries.
UR2916 0      XX_PAGE    = 0,18,18,1 %;      !Transaction number.
UR2917 0
UR2918 0      LITERAL
UR2919 0      XX_ENTRY= 1;                    !Length of extra reference entry.
UR2920 0
UR2921 0
UR2922 0      XELSE
UR2923 0      ! Structure of index entry for -11s, VAXes, and -20s with extended addressing.
UR2924 0      MACRO
UR2925 0      X_PREV     = 0,0,%BPVAL,0 %;      !Link to previous item      (WORD)
UR2926 0      X_NEXT     = 1,0,%BPVAL,0 %;      !Link to next item (0 ==> EOL) (WORD)
UR2927 0      X_SUBX     = 2,0,%BPVAL,0 %;      !Sub index pointer          (WORD)
UR2928 0      X_SUBC     = 3,0,8,0 %;          !Sub index level            (BYTE)
UR2929 0      X_BARS     = 3,8,1,0 %;          !Change bar flag            (BIT)
UR2930 0      X_REF      = 4,0,%BPVAL,0 %;      !Extra reference pointer     (WORD)
UR2931 0      X_TEXT     = 5,0,%BPVAL,0 %;      !Pointer to text of index item (WORD)
UR2932 0
UR2933 0      LITERAL
UR2934 0      X_ENTRY    = 6;                !Number of words in index entry.
UR2935 0
UR2936 0      ! Structure of extra reference entry (-11s, VAXes, -20 with extended addressing).
UR2937 0      MACRO
UR2938 0      XX_LINK    = 0,0,%BPVAL,0 %;      !Pointer to additional entries.
UR2939 0      XX_PAGE    = 1,0,%BPVAL,1 %;      !Transaction number.
UR2940 0
UR2941 0      LITERAL
UR2942 0      XX_ENTRY= 2;                    !Length of extra reference entry.
UR2943 0      XFI
UR2944 0
UR2945 0      !Dummy datasets
UR2946 0      LITERAL
UR2947 0      DS_X_ENTRY=X_ENTRY,
UR2948 0      DS_XX_ENTRY=XX_ENTRY,
UR2949 0      DS_X_STRING=0;
UR2950 0
UR2951 0      !
UR2951 0      End of INDEX.REQ

```

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

6
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 109
(2)

: 2952 0 REQUIRE 'REQ:IRAC.REQ'; ! IRAC_... structure Macros & literal

IRAC.REQ Macros, literals, and structures defining the IRAC.

Version: 'V04-000'

*
* COPYRIGHT: (c) 1978, 1980, 1982, 1984 BY
* DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
* ALL RIGHTS RESERVED.
*

* THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
* ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
* INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
* COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
* OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
* TRANSFERRED.
*

* THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
* AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
* CORPORATION.
*

* DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
* SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*

++
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
 Macros, literals, and structures defining the IRAC (Input Record
 Area).

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

 004 KAD00004 Keith Dawson 07-Mar-1983
 Global edit of all modules. Updated module names, idents,
 copyright dates. Changed require files to BLISS library.

--
MACRO

IRAC_BARS = (IRAC[00]) < BAR ; !TRUE if this line is marked with change bars.
IRAC_SEQN_FLAG = IRAC[01] % ; !TRUE if ISEQN is an SOS style line number.
IRAC_ISEQN = IRAC[02] % ; Input line number or sequence number.
IRAC_IPAGEN = IRAC[03] % ; Input page number.
IRAC_FSPECP = IRAC[04] % ; CH\$PTR to the file-spec
IRAC_FSPECC = IRAC[05] % ; Number characters in the file-spec
IRAC_DRAFT_FLG = IRAC[06] % ; !TRUE/FALSE flag for /DRAFT.

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

L 6
15-Sep-1984 23:07:40
15-Sep-1984 22:52:35

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]IRAC.REQ;1

Page 111
(1)

.. R3010 0
.. R3011 0
.. R3012 0
.. R3013 0
.. R3014 0
.. MR3015 0
.. R3016 0
.. R3017 0
.. R3018 0

LITERAL IRAC_SIZE = 7; !Number of elements in IRAC.
MACRO IRAC_DEFINITION =
 VECTOR[IRAC_SIZE]%;
!
 End of IRAC.REQ

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

M 6
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]DSRLIB.REQ;1

Page 112
(2)

; 3019 0 REQUIRE 'REQ:KC.REQ'; ! Definition of macros: KCNS, KCS, & TISF

Version: 'V04-000'

```
*****
*
*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
*  ALL RIGHTS RESERVED.
*
*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
*  ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
*  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
*  TRANSFERRED.
*
*  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
*  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
*  CORPORATION.
*
*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*****
```

++
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
Defines macros for reading a single character from input.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

002 KAD00002 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.

--

KCNS reads a character and advances the cursor. Substitution, as indicated
by the presence of the Substitute flag, is never performed.

MACRO

```
kcns( )
  (IF .fs_length (ira) LEQ 0
  THEN
    BEGIN
      EXTERNAL LITERAL
      rintes : UNSIGNED (8);
```

```

MR3077 0      khar = rintes;
MR3078 0      fs_length (ira) = -1;
MR3079 0      END
MR3080 0      ELSE
MR3081 0      fs_rchar (ira,khar))
MR3082 0      %;
MR3083 0
MR3084 0      ! KCS reads a character; it calls SUBST if the character read is the
MR3085 0      ! Substitute flag and recognition of the Substitute flag is enabled.
MR3086 0
MR3087 0      MACRO
MR3088 0      kcs( ) =
MR3089 0      BEGIN
MR3090 0      EXTERNAL khar;
MR3091 0      EXTERNAL ROUTINE subst;
MR3092 0      kcns();
MR3093 0      !*****Temporarily turned off
MR3094 0      IF tist (.khar)
MR3095 0      THEN
MR3096 0      subst ();
MR3097 0      !*****End of temporarily turned off
MR3098 0      END
MR3099 0      %;
MR3100 0
MR3101 0      ! TISF returns the value TRUE if KHAR contains the Substitute flag, and
MR3102 0      ! recognition of the Substitute flag is enabled.
MR3103 0
MR3104 0      MACRO
MR3105 0      tist (khar) =
MR3106 0      (.flgt [sub_flag,flag_enabled]      ! Recognition of Substitute flag enabled?
MR3107 0      AND
MR3108 0      .sca_flags      ! Recognition of all flags enabled?
MR3109 0      AND
MR3110 0      (khar EQL .flgt [sub_flag,flag_character])) ! Right character?
MR3111 0      %;
MR3112 0
MR3113 0      !
MR3113 0      End of KC.REQ

```


FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

C 7
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 115
(2)

3114 0
U 3115 0
U 3116 0
3117 0
3118 0
3119 0

%IF DSRPLUS %THEN
REQUIRE 'REQ:KEYWORD.REQ'; ! Keyword-table definitions
%FI
REQUIRE 'REQ:KWITEM.REQ'; ! Macros to access command-keyword fields

R3120 0
R3121 0
R3122 0
R3123 0
R3124 0
R3125 0
R3126 0
R3127 0
R3128 0
R3129 0
R3130 0
R3131 0
R3132 0
R3133 0
R3134 0
R3135 0
R3136 0
R3137 0
R3138 0
R3139 0
R3140 0
R3141 0
R3142 0
R3143 0
R3144 0
R3145 0
R3146 0
R3147 0
R3148 0
R3149 0
R3150 0
R3151 0
R3152 0
R3153 0
R3154 0
R3155 0

Version: 'V04-000'

* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY *
* DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS. *
* ALL RIGHTS RESERVED. *

* THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED *
* ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE *
* INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER *
* COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY *
* OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY *
* TRANSFERRED. *

* THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE *
* AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT *
* CORPORATION. *

* DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS *
* SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL. *

++
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS
ABSTRACT: Defines macros for fields of key word entries.
ENVIRONMENT: Transportable BLISS
AUTHOR: Rich Friday CREATION DATE: 1978

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

E 7
15-Sep-1984 23:07:40
15-Sep-1984 22:52:44

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]KWITEM.REQ;1 Page 117
(2)

R3156 0
R3157 0
R3158 0
R3159 0
R3160 0
R3161 0
R3162 0
R3163 0
R3164 0
R3165 0
R3166 0
R316 0

MODIFIED BY:

005 RER00005 Ron Randall 17-Mar-1983
Changed iih to iit to better reflect its topnote function.
004 RER00004 Ron Randall 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.
Changed all <macro name>s to kwitem_<macro_name> to avoid
conflict with LP1.BLI.

--

MACRO

Length of keyword.

item_length (item) =

BEGIN

BIND x = .item [0]: VECTOR;

x [0]

END %.

Address of keyword, CHSPTR.

p_word (item) =

BEGIN

BIND x = .item [0]: VECTOR;

x [1]

END %.

Handler code.

kwitem_handler_code (item) = item [1] %.

Same field does double duty.

kwitem_next_list (item) = item [1] %.

All options collectively.

kwitem_actions (item) = item [2] %.

TRUE if keyword chain continues.

kwitem_chain_continues (item) = (item [2]) <8, 1> %.

TRUE if a defined abbreviation.

kwitem_abbreviation (item) = (item [2]) <9, 1> %.

TRUE for commands related to .IF.

kwitem_rif (item) = item <10, 1> %.

TRUE if illegal in a footnote.

kwitem_iif (item) = item <11, 1> %.

TRUE if waiting text to be forced out.

kwitem_do_outnj (item) = item <12, 1> %.

TRUE if command has a numerical argument.

kwitem_do_getnum (item) = item <13, 1> %.

TRUE if illegal in a topnote.

kwitem_iit (item) = item <14, 1> %.

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

6 7
15-Sep-1984 23:07:40
15-Sep-1984 22:52:44

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]KWITEM.REQ;1 Page 119
(3)

```
: R3225 0
: R3226 00
: R3227 00
: R3228 00
: R3229 00
: R3230 0
:
: Minimum number of characters for a match.
: kwitem_minimum_match (item) = (item [2]) <0, 8> %;
:
: End of KWITEM.REQ
```

3231 0
3232 0
3233 0
3234 0
3235 0
3236 0
3237 0
3238 0
3239 0
3240 0

```
%IF DSRPLUS %THEN
  REQUIRE 'REQ:KWS.REQ';           ! Definitions for the Attribute Keyword Structure
  REQUIRE 'REQ:KWSCON.REQ';       ! Definitions for .SEND CONTENTS keywords
  REQUIRE 'REQ:KWSTYL.REQ';       ! KWSS... keyword definitions for .STYLE <elfit:h>
  REQUIRE 'REQ:KWTDEF.REQ';       ! KWSPDP..., KWSPDM keyword definitions for $$entities
  REQUIRE 'REQ:KWXPYP.REQ';       ! KWXS... keyword definitions for .XP, .YP, .ENA XP
  %FI
  REQUIRE 'REQ:LETTER.REQ';       ! Alpha testing and case changing macros
```

Version: 'V04-000'

```
*****
*
*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
*  ALL RIGHTS RESERVED.
*
*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
*  ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
*  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
*  TRANSFERRED.
*
*  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
*  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
*  CORPORATION.
*
*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*****
```

++
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
Macros to test if a character is an appropriately flavored letter,
and macros to convert between upper and lower case.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

002 KAD00002 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.

--
MACRO

upper letter (khar) = ! See if upper case letter
(khar GEQ %C'A' AND khar LEQ %C'Z')

%,

lower letter (khar) = ! See if lower case letter
(khar GEQ %C'a' AND khar LEQ %C'z')

%,

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

J 7
15-Sep-1984 23:07:40
15-Sep-1984 22:52:49

VAX-11 Bliss-32 V4.0-742
_S255\$DUA28:[RUNOFF.SRC]LETTER.REQ;1 Page 122
(1)

MR3298 0
MR3299 0
R3300 0
R3301 0
R3302 0
MR3303 0
MR3304 0
R3305 0
R3306 0
MR3307 0
MR3308 0
R3309 0
R3310 0
R3311 0

```
letter (khar) = ! See if any type of letter
    (upper_letter (khar) OR lower_letter (khar))
%;
```

MACRO

```
upper_case (khar) = ! Convert to upper case
    (khar + %C'A' - %C'a')
%,
```

```
lower_case (khar) = ! Convert to lower case
    (khar + %C'a' - %C'A')
%;
```

!

End of LETTER.REQ

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

K 7
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 123
(2)

; 3312 0 REQUIRE 'REQ:LODEFS.REQ'; ! Literal definitions of LSTOPS operations

LODEFS.REQ Define function literals for LSTOPS.BLI

Version: 'V04-000'

```
*****
*
*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
*  ALL RIGHTS RESERVED.
*
*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
*  ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
*  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
*  TRANSFERRED.
*
*  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
*  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
*  CORPORATION.
*
*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*
*****
```

++
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
This file contains a list of operation codes that control which special
listing functions are processed by LSTOPS.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

005 REM00005 Ray Marshall 17-May-1984
Added support for /DEC:INTERNAL:OUTPUT_LINE_NUMBER.
Removed LSTOPS_BARS because it is no longer referenced.

004 KAD00004 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.

--

LITERAL
LSTOPS_NONE = 0, !Don't do any at all.
LSTOPS_ALL !Do all requested options.

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

M 7
15-Sep-1984 23:07:40 VAX-11 Bliss-32 V4.0-742 Page 125
15-Sep-1984 22:52:53 _\$255\$DUA28:[RUNOFF.SRC]LODEFS.REQ;1 (1)

```

: R3370 0
: R3371 00
: R3372 00
: R3373 00
: R3374 00
: R3375 00
: R3376 00
: R3377 00
: R3378 00
: R3379 00
: R3380 00
: R3381 0

      = 1^BPOSIT(BAR--) + !Change bars
      1^BPOSIT(CND--) + !/DEBUG:CONDITIONALS
      1^BPOSIT(ISO--) + !/SEQUENCE
      1^BPOSIT(OSQ--) + !/DEC_INTERNAL:OUTPUT_LINE_NUMBER
      1^BPOSIT(RIT--), !/RIGHT

      ! And for blank lines:

LSTOPS_NO_ISEQN = 1^BPOSIT(BAR--) + !Everything except SEQUENCE
                  1^BPOSIT(CND--) + !Change bars
                  1^BPOSIT(RIT--), !/DEBUG:CONDITIONALS
                  !/RIGHT
```

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

N 7
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 126
(2)

; 3382 0 REQUIRE 'REQ:MSG.REQ'; ! Macros used in error messages

Version: 'V04-000'

```
*****
*   COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
*   DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
*   ALL RIGHTS RESERVED.
*
*   THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
*   ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
*   INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
*   COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
*   OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
*   TRANSFERRED.
*
*   THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
*   AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
*   CORPORATION.
*
*   DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
*   SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*****
```

++
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
Defines macros used by error-message processing.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

002 KAD00002 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.

--
MACRO

msg (l, s) =

BEGIN
EXTERNAL ROUTINE
filout;

%IF %LENGTH EQL 1

%THEN

filout (-1, %CHARCOUNT(l), CH\$PTR(UPLIT(l)))

%ELSE

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

15-Sep-1984 23:07:40
15-Sep-1984 22:53:08

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]MSG.REQ;1

Page 128
(1)

```
MR3440 0      fileut (-1, l, s)
MR3441 0      %FI
MR3442 0      %; END
MR3443 0
MR3444 0
MR3445 0      MACRO
MR3446 0      ermsg (s)=
MR3447 0      [HSPTR ( UPLIT (%STRING(%CHAR(%CHARCOUNT (s)),s)) )
MR3448 0      %;
MR3449 0
MR3450 0      MACRO
MR3451 0      bell =
MR3452 0      %CHAR(%O'07')
MR3453 0      %,
MR3454 0
MR3455 0      del =
MR3456 0      %CHAR(%O'177')
MR3457 0      %;
MR3458 0
MR3459 0      :
                        End of MSG.REQ
```

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

^{D 8}
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1

Page 129
(2)

; 3460 0 REQUIRE 'REQ:NDXRTY.REQ'; ! .BIX-format binary file record definitions

Version: 'V04-000'

```
*****
*
*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
*  ALL RIGHTS RESERVED.
*
*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
*  ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
*  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
*  TRANSFERRED.
*
*  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
*  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
*  CORPORATION.
*
*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*****
```

FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
This file contains literals and macros defining Index record groups
found in either a .BIX or .BRN file.

ENVIRONMENT: Transportable BLISS

AUTHOR: J.P. Kellerman

CREATION DATE: January 1982

MODIFIED BY:

003 KAD00003 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.

--
An Index Record Group consists of an identification code stored
in the lower half of the first fullword followed by zero or more
fullwords which make up the rest of the record group.

LITERAL		Index Record Group Identification codes are:
NEW_SEQUENCE = 1,	:	New File Group.
INDEX_XTN = 2,	:	Page Number Transaction Record Group.
INDEX_ENTRY = 3,	:	Index Entry Record Group.

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

F 8
15-Sep-1984 23:07:40
15-Sep-1984 22:53:28

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]NDXRTY.REQ;1 Page 131
(1)

: R3518 0
: R3519 0
: R3520 0
: R3521 0

INDEX_ATTRIBUTES = 4; ! XPLUS-YPLUS Index Entry Attributes Record Group
! (.BRN files only).

! End of NDXRTY.REQ

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

6 8
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 132
(2)

3522 0
U 3523 0
U 3524 0
3525 0
3526 0
3527 0

%IF DSRPLUS %THEN
REQUIRE 'REQ:NDXXPL.REQ'; ! .XPLUS attribute-structure record definitions
%FI
REQUIRE 'REQ:NMLST.REQ'; ! NMLST_...., NM_...., and NUMBER_LIST

Version: 'V04-000'

*
* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
* DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
* ALL RIGHTS RESERVED.
*

* THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
* ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
* INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
* COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
* OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
* TRANSFERRED.
*

* THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
* AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
* CORPORATION.
*

* DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
* SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*

++
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
Definitions pertaining to lists of numbers picked up by GLNM.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

002 KAD00002 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.

--
LITERAL
NMLST__COUNT = 1; !The number of numbers found.
NMLST__VALUE = 2; !The values of the numbers.
NMLST__DESCR = 3; !What the numbers looked like.

LITERAL
NMLST_MAXSIZE = 40;

STRUCTURE
NUMBER_LIST[I,Attribute;Length=NMLST_MAXSIZE] =

```

R3585 0
R3586 0      [XUPVAL*( 2*length + 1 )]
R3587 1      (If Attribute eq1 NMLST__COUNT
R3588 1      then
R3589 1      NUMBER_LIST
R3590 1      else
R3591 2      (NUMBER_LIST + XUPVAL*1 +
R3592 3      (if Attribute eq1 NMLST__VALUE
R3593 4      then XUPVAL*(I - 1)
R3594 0      else XUPVAL*(I - 1 + Length) ));
R3595 0
R3596 0      ! Names for NMLST_DESCRIPT things.
R3597 0      !
R3598 0      LITERAL
R3599 0      NM_NULL      = 0,      ! No number given.
R3600 0      NM_UNSIGNED = 1,      ! Number was unsigned.
R3601 0      NM_PLUS     = 2,      ! A '+' preceeded the number.
R3602 0      NM_MINUS    = 3,      ! A '-' preceeded the number.
R3603 0      NM_BAD      = 4;      ! The number was in error.
R3604 0
R3605 0      MACRO
R3606 0      NMLST_COUNT      = NMLST [0,NMLST__COUNT]%,
R3607 0      NMLST_VALUE (I)  = NMLST [I,NMLST__VALUE]%,
R3608 0      NMLST_DESCR (I)  = NMLST [I,NMLST__DESCR]%;
R3609 0
R3610 0      !
R3610 0      End of NMLST.REQ

```

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

J 8
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 135
(2)

; 3611 0 REQUIRE 'REQ:NUMPRM.REQ'; ! NUM_... values returned from GETNUM

Version: 'V04-000'

```
*****
*
*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
*  ALL RIGHTS RESERVED.
*
*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
*  ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
*  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
*  TRANSFERRED.
*
*  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
*  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
*  CORPORATION.
*
*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*****
```

++
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
This data structure is used to save results picked up by GETNUM.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

002 KAD00002 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.

--
MACRO

numprm define =
VECTOR [4]
%,

num_result = !Completion code returned by GETNUM.
numprm [0] !See GETNUM.BLI for a description.

%,

num_value =

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

L⁸
15-Sep-1984 23:07:40
15-Sep-1984 22:53:41

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]NUMPRM.REQ;1 Page 137
(1)

```
: MR3669 0
: R3670 0
: R3671 0
: MR3672 0
: MR3673 0
: R3674 0
: R3675 0
: MR3676 0
: MR3677 0
: R3678 0
: R3679 0
: R3680 0

      numprm [1]      !The value of the number processed.
      %,
      num_sign =
      numprm [2]      !TRUE if the number was signed.
      %,
      num_length =
      numprm [3]      !Number of digits scanned.
      %;
      !
      End of NUMPRM.REQ
```

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

M 8
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_\$255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1

Page 138
(2)

; 3681 0 REQUIRE 'REQ:OPDEV.REQ'; ! OP_DEV_... literals: type of output device

Version: 'V04-000'

*
* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
* DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
* ALL RIGHTS RESERVED.
*

* THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
* ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
* INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
* COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
* OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
* TRANSFERRED.
*

* THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
* AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
* CORPORATION.
*

* DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
* SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*

++
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:

Defines the literals used to determine what the target device for the
output file is.

The field these literals are used with (OP_DEVICE) is found in GCA.
Its initial value is captured by the CLI, put into RNOMAC, and picked
up later by DOOPTS to be put into GCA.

ENVIRONMENT: Transportable BLISS

AUTHOR: Ray Marshall

CREATION DATE: 7-January-1983

MODIFIED BY:

004 KAD00004 Keith Dawson 11-May-1983
Made FLIP output stream-format (with <cr><lf>).

003 KAD00003 Keith Dawson 23-Mar-1983
Added support for LN01E; put FLIP here as an output device
type (instead of the bit GCA_FLIP).

002 KAD00002 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.

```

: R3739 0 !--
: R3740 0
: R3741 0 $LITERAL
: R3742 0      op_dev_line_printer = 0,      !Output device is a...
: R3743 0      op_dev_first = %number($xpo$distinct) ! line-printer (default).
: R3744 0      op_dev_diablo = $DISTINCT,      ! Diablo-style terminal.
: R3745 0      op_dev_flip = $DISTINCT,      ! "Electronic Book" output.
: R3746 0      op_dev_stream_output = %number($xpo$distinct),
: R3747 0      op_dev_vt100 = $DISTINCT,      ! VT100 terminal.
: R3748 0      op_dev_ln01 = $DISTINCT,      ! LN01 laser printer.
: R3749 0      op_dev_ln01e = $DISTINCT,      ! European-style LN01.
: R3750 0      op_dev_last = %number($xpo$distinct);
: R3751 0
: R3752 0 MACRO
: MR3753 0      op_dev_write_output_line =
: MR3754 0
: MR3755 0      NOTE: the following code depends on the output-device values in
: MR3756 0      OPDEV.REQ: specifically, on the fact that the stream-output,
: MR3757 0      bare-cr-emphasis devices (LP and Diablo) have device numbers
: MR3758 0      smaller than those of the escape-sequence-emphasis devices (LN01,
: MR3759 0      VT100). It is coded this way in the interest of efficiency: only
: MR3760 0      one fetch and compare is needed.
: MR3761 0      BEGIN
: MR3762 0      IF .gca_op_dev LEQ op_dev_stream_output
: MR3763 0      THEN
: MR3764 0          clh (clh_write_out)          ! LP and Diablo (STREAM) devices.
: MR3765 0      ELSE
: MR3766 0          clh (clh_out_nocrlf)         ! LN01 and VT100 (non-STREAM) devices.
: MR3767 0      END
: R3768 0      %:
: R3769 0      !
:                               End of OPDEV.REQ

```

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

6 9
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]DSRLIB.REQ;1

Page 141
(2)

: 3770 0 REQUIRE 'REQ:OUTOPT.REQ'; ! OUTOPT_... output control vector elements

Version: 'VG4-000'

```
*****
*   COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
*   DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
*   ALL RIGHTS RESERVED.
*
*   THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
*   ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
*   INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
*   COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
*   OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
*   TRANSFERRED.
*
*   THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
*   AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
*   CORPORATION.
*
*   DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
*   SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*****
```

++
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
Options specifying final output generation.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

003 KAD00003 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.

--
MACRO

```
outopt_und_char = outopt[0] ! Character to be used for underlining.
outopt_und_nosp = outopt[1] ! True if the underlining character is non-spacing.
outopt_und_sep = outopt[2] ! True if underlining is to be done by
                        ! putting OUTOPT_UND_CHAR on the next line.
outopt_back = outopt[3] ! True if the backspace character is to be used.
```

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

E 9
15-Sep-1984 23:07:40
15-Sep-1984 22:53:47

VAX-11 Bliss-32 V4.0-742
_S255\$DUA28:[RUNOFF.SRC]OUTOPT.REQ;1

Page 143
(1)

```
MR3828 0      outopt_over      = outopt[4]      ! TRUE if should do special functions
R3829 00      %;                  ! by overprinting the same line.
R3830 00
MR3831 00      outopt_bldn      = outopt[5]      ! Amount of overstriking to be done when bolding.
R3832 00      %;
R3833 00
R3834 00      LITERAL
R3835 00      outopt_size = 6;
R3836 00
R3837 00      MACRO
MR3838 00      outopt_define =
MR3839 00      VECTOR [outopt_size]
R3840 00      %;
R3841 00
R3842 0      !                      End of OUTOPT.REQ
```

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

F 9
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 144
(2)

; 3843 0 REQUIRE 'REQ:PASS.REQ'; ! PASS_...., EMPH_... definitions for final output

Version: 'V04-000'

COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
ALL RIGHTS RESERVED.

THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
TRANSFERRED.

THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
CORPORATION.

DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.

FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
Literals for counting output passes in LOUT1.

ENVIRONMENT: Transportable BLISS

AUTHOR: Keith Dawson

CREATION DATE: March 1983

MODIFIED BY:

001 KAD00001 Keith Dawson 22-Mar-1983

If no emphasis is present, the line is put out in 1 pass. This is also the
case if we are generating VT100 output or FLIP output, or if the user said
/BACKSPACE. If none of these cases applies, then multiple passes are needed
to generate the built-up output line.

If any emphasis is present, the emphasized copies of the line are put out
first; the "real," entire line is generated last. In this case, pass 1
serves to set up the later passes, but does not produce output.

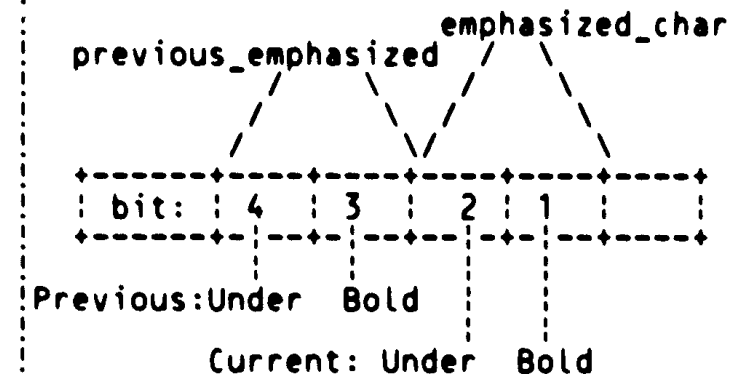
pass 1 - calculate	pass 2 - bold
pass 3 - underline	pass 4 - bold-underline
pass 5 - overstrike	pass 6 - bold-overstrike

pass 7 - output line, if any emphasis was present

LITERAL

```
pass_setup = 1,
pass_bold = 2,
pass_underline=3,
pass_bold_underline=4,
pass_overstrike = 5,
pass_bold_overstrike = 6,
pass_real_text = 7;
```

Arrangement of bits in EMPHASIS_BITS:



MACRO

```
emph_current_bold =      ! TRUE if this character is bolded.
    emphasis_bits<1,1>
%,
emph_current_underline = ! TRUE if this character is underlined.
    emphasis_bits<2,1>
%,
emph_current_emphasized = ! Both bolding and underlining together.
    emphasis_bits<1,2>
%,
emph_previous_bold =     ! TRUE if last character output was bolded.
    emphasis_bits<3,1>
%,
emph_previous_underline = ! TRUE if last character output was underlined.
    emphasis_bits<4,1>
%,
emph_previous_emphasized = ! Both bits together.
    emphasis_bits<3,2>
%;
```

End of PASS.REQ

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

1 9
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 BLISS-32 V4.0-742 Page 147
_S255\$DUA28.[RUNOFF.SRC]DSRLIB.REQ;1 (2)

; 3952 0 REQUIRE 'REQ:PDT.REQ'; ! PDT_... paragraph definition items

Version: 'V04-000'

```
*****
*
*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
*  ALL RIGHTS RESERVED.
*
*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
*  ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
*  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
*  TRANSFERRED.
*
*  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
*  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
*  CORPORATION.
*
*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*****
```

++
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
Items that define a paragraph.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

002 KAD00002 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.

--

MACRO

```
pdt_indent = pdt [00] ! Add this to .SCA_RM at start of a paragraph.
pdt_x,
pdt_skip = pdt [01] ! Skip this many lines before starting.
pdt_x,
pdt_tp = pdt [02] ! Do a test page before starting a paragraph.
pdt_x;
```

LITERAL

pdt_size = 03;

15-Sep-1984 23:07:40
15-Sep-1984 22:53:57

Page 149
(1)

...	R4010	0
...	R4011	0
...	MR4012	0
...	MR4013	0
...	R4014	0
...	R4015	0
...	R4016	0

```
MACRO
    pdt_definition =
    VECTOR [pdt_size]
    x;
```

! End of PDT.REQ

.....

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

L 9
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 150
(2)

: 4017 0 REQUIRE 'REQ:PHDEF.REQ'; ! PHAN_... macros & literal

PHDEF.REQ Definitions having to do with the page handler

Version: 'V04-000'

```
*****
*
* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
* DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
* ALL RIGHTS RESERVED.
*
* THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
* ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
* INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
* COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
* OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
* TRANSFERRED.
*
* THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
* AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
* CORPORATION.
*
* DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
* SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*
*****
```

++
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:

This require file defines the structure used to control page formatting.
The basic structure name is PHAN. A macro herein (PHAN_DEFINITION) is used
when defining the structure as an external. Then, the other macros defined
by this require file are used to access the PHAN structure.

This require file also defines any literals related to page formatting.

***** NOTE *****

The items PHAN_LCHAR and PHAN_RCHAR are not yet supported by any routines.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 16-October-1980

MODIFIED BY:

```
007 REM00007 Ray Marshall 16-Nov-1983
    For the fields that need PHAN[##] references, also added macros
    without the preceding dot so SAVRES can load them. These new
    fields have similar names but with "_f_" within them.

006 KFA00006 Ken Alden 15-Mar-1983
    Extended SAVE/RESTORE to DSR.
```

```

R4075 0
R4076 0
R4077 0
R4078 0
R4079 0
R4080 0
R4081 0
R4082 0
R4083 0
R4084 0
R4085 0
R4086 0
R4087 0
R4088 0
R4089 0
R4090 0
R4091 0
R4092 0
R4093 0
R4094 0
R4095 0
R4096 0
R4097 0
R4098 0
R4099 0
R4100 0
R4101 0
R4102 0
R4103 0
R4104 0
R4105 0
R4106 0
R4107 0
R4108 0
R4109 0
R4110 0
R4111 0
R4112 0
R4113 0
R4114 0
R4115 0
MR4116 0
R4117 0
R4118 0
R4119 0
R4120 0
R4121 0

```

005 KAD00005 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.

--

MACRO

```

PHAN_TOP_PAGE = PHAN[00]%, !True, if at top of page. *
PHAN_L LINES = .PHAN[01]%, !(SAVE)Logical lines per page.
PHAN_f_L LINES = PHAN[01]%, !(SAVE)Logical lines per page.
PHAN_P LINES = PHAN[02]%, !Physical lines per page.
PHAN_L LINES TP = PHAN[03]%, !Logical lines so far.
PHAN_FIGURE = PHAN[04]%, !Count of deferred figure lines
PHAN_RIGHT = PHAN[05]%, !Amount to shift text right on page.
PHAN_TOP_FIRST = PHAN[06]%, !TRUE if top of first page *
PHAN_HEADER = .PHAN[07]%, !(SAVEALL)TRUE if headers wanted on pages *
PHAN_f_HEADER = PHAN[07]%, !(SAVEALL)TRUE if headers wanted on pages *
PHAN_FORM PEND = PHAN[08]%, !NONZERO if a form feed is waiting. *
PHAN_S LINES = PHAN[09]%, !Number of spooled lines per page
PHAN_PAGING = .PHAN[10]%, !(SAVEALL)TRUE if .PAGING was said or implied. *
PHAN_f_PAGING = PHAN[10]%, !(SAVEALL)TRUE if .PAGING was said or implied. *
PHAN_CMD PAGING = PHAN[11]%, !TRUE if /NOPAGING was not said or implied. *
PHAN_DOWN = PHAN[12]%, !Move output down this many lines.
PHAN_SIMULATE = PHAN[13]%, !TRUE if top of page should be done
!with blank lines rather than a FF. *
PHAN_BOTTOM = PHAN[14]%, !Number of filled lines when at
!bottom of page.
PHAN_PAUSE = PHAN[15]%, !TRUE if the user said /PAUSE. *
PHAN_L CHAR = PHAN[16]%, !Character to the left of the page number.
PHAN_R CHAR = PHAN[17]%, !Character to the right of the page number.
PHAN_DEPTH = PHAN[18]%, !TRUE if a long .PAGE SIZE can generate
!more than one FF. *

```

MACRO

```

PHAN_DEFINITION =
VECTOR[19]%;

```

LITERAL

```

PHAN_MIN_PAGE_LENGTH = 13; !No output page may be defined in any
!way to be smaller then this.

```

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

B 10
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 153
(2)

: 4122 0 REQUIRE 'REQ:RNOMAC.REQ'; ! RNOS... command line table items

```

**
FACILITY:      DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
  RUNOFF Command Information.  Initialized by the command line interface
  and picked up for distribution by DOOPTS.

ENVIRONMENT:   Transportable BLISS

AUTHOR:       Rich Friday

CREATION DATE: 1978

MODIFIED BY:

012    REM00012      Ray Marshall      5-December-1983
        Added RNOSV_LN01_LOAD to indicate that one wishes to load
        fonts before printing this file on an LN01.

011    REM00011      Ray Marshall      13-Sep-1983
        Added bit RNOSV_LN01_HEADER to support disabling the font
        control header information from being put into an .LN1 output
        file.

010    KAD00010      Keith Dawson      2-Jun-1983
        Added bits RNOSV_S_RIGHT and RNOSV_S_DOWN to tell if the
        qualifiers were explicitly given.

009    KAD00009      Keith Dawson      22-Mar-1983
        Renamed LN01 italic/underline and portrait/landscape bits,

```



```

in order to reflect the default values.
Got rid of RNO$V_FLIP bit, in favor of (.gca_op_dev
EQL cp_dev_flip).

008      KAD00008      Keith Dawson      07-Mar-1983
Global edit of all modules. Updated module names, ident's,
copyright dates. Changed require files to BLISS library.

--

$FIELD $rno$cmd_fields = SET

! File specification string descriptors.

RNO$T_INPUT      = [$DESCRIPTOR(FIXED)] ,      ! Input
RNO$T_OUTPUT     = [$DESCRIPTOR(FIXED)] ,      ! Output
RNO$T_INTERMEDIATE = [$DESCRIPTOR(FIXED)] ,      ! Binary intermediate .BRN type file
RNO$T_DROP_REC   = [$DESCRIPTOR(FIXED)] ,      ! Drop-record file

! Miscellaneous other string descriptors.

rno$t_program_name = [$DESCRIPTOR(FIXED)] ,      ! Name of program
rno$t_program_filename = [$DESCRIPTOR(FIXED)] ,      ! Filename of program

rno$t_pages      = [$DESCRIPTOR(FIXED)] ,      ! Page range string descriptor:
$OVERLAY( $SUB_FIELD( rno$t_pages, STR$H_LENGTH ) )
rno$h_pages      = [$BYTES(2)] ,      ! length of page range string
$OVERLAY( $SUB_FIELD( rno$t_pages, STR$A_POINTER ) )
rno$a_pages      = [$POINTER] ,      ! pointer to page range string
$CONTINUE

rno$t_variant     = [$DESCRIPTOR(FIXED)] ,      ! Variant string descriptor:
$OVERLAY( $SUB_FIELD( rno$t_variant, STR$H_LENGTH ) )
rno$h_variant     = [$BYTES(2)] ,      ! length of variant string
$OVERLAY( $SUB_FIELD( rno$t_variant, STR$A_POINTER ) )
rno$a_variant     = [$POINTER] ,      ! pointer to variant string
$CONTINUE

rno$a_datetime    = [$BYTES(12)] ,      ! System date and time
$OVERLAY( rno$a_datetime )

rno$h_year        = [$BYTES(2)] ,
rno$h_month       = [$BYTES(2)] ,
rno$h_monthday    = [$BYTES(2)] ,
rno$h_hours       = [$BYTES(2)] ,
rno$h_minutes     = [$BYTES(2)] ,
rno$h_seconds     = [$BYTES(2)] ,
$CONTINUE

! Three words of switch option bits:

rno$v_options     = [$BYTES(8)] ,      ! Command option indicators:
$OVERLAY( rno$v_options )

rno$v_option1     = [$BYTES(2)] ,
rno$v_option2     = [$BYTES(2)] ,
rno$v_option3     = [$BYTES(2)] ,
rno$v_option4     = [$BYTES(2)] ,

```

```

R4237 0      $OVERLAY ( rno$V_option1 )
R4238 0
R4239 0      rno$V_2_automatic = [$BITS(2)]      ! Carries state of /AUTOMATIC to DOOPTS
R4240 0      $OVERLAY ( rno$V_2_automatic )
R4241 0      rno$V_automatic = [$BIT] ;           ! execute multiple passes and utilities as needed
R4242 0      rno$V_s_automatic = [$BIT] ;         ! /AUTOMATIC explicitly specified
R4243 0
R4244 0      rno$V_2_backspace = [$BITS(2)]      ! backspace on same line
R4245 0      $OVERLAY ( rno$V_2_backspace )
R4246 0      rno$V_backspace = [$BIT] ;           ! backspace on same line
R4247 0      rno$V_s_backspace = [$BIT] ;         ! /BACKSPACE explicitly specified
R4248 0
R4249 0      rno$V_2_change = [$BITS(2)] ,        ! change bars requested
R4250 0      $OVERLAY ( rno$V_2_change )
R4251 0      rno$V_change = [$BIT] ;              ! change bars allowed
R4252 0      rno$V_s_change = [$BIT] ;            ! /CHANGE explicitly specified
R4253 0
R4254 0      rno$V_chng_char = [$BIT] ;           ! change bar character specified (see below)
R4255 0
R4256 0      rno$V_2_cross_reference = [$BITS(2)] , ! Carries state of /CROSSREFERENCE to DOOPTS
R4257 0      $OVERLAY ( rno$V_2_cross_reference )
R4258 0      rno$V_cross_reference = [$BIT] ;      ! translate cross references
R4259 0      rno$V_s_cross_reference = [$BIT] ;    ! /CROSS_REFERENCE explicitly specified
R4260 0
R4261 0      rno$V_deb_cond = [$BIT] ;             ! go through all paths of .Ifs and output draft flags
R4262 0      rno$V_deb_cont = [$BIT] ;             ! echo toc entries in output file
R4263 0      rno$V_deb_cros = [$BIT] ;             ! echo .REFs & $FOOs in output file
R4264 0      rno$V_deb_files = [$BIT] ;            ! put file names in the output.
R4265 0      rno$V_deb_index = [$BIT] ;            ! echo index entries in output file
R4266 0      rno$V_deb_save = [$BIT] ;             ! echo .SAVEs & .RESS in output file
R4267 0
R4268 0      (1 free bit in OPTION1)
R4269 0
R4270 0      $OVERLAY ( rno$V_option2 )
R4271 0
R4272 0      rno$V_2_intermediate = [$BITS(2)] ,   ! Carries state of /INTERMEDIATE to DOOPTS
R4273 0      $OVERLAY ( rno$V_2_intermediate )
R4274 0      rno$V_intermediate = [$BIT] ;          ! a .BRN type file will be generated
R4275 0      rno$V_s_intermediate = [$BIT] ;        ! /INTERMEDIATE explicitly specified
R4276 0
R4277 0      rno$V_2_log = [$BITS(2)] ,            ! print final statistics
R4278 0      $OVERLAY ( rno$V_2_log )
R4279 0      rno$V_log = [$BIT] ;                  ! print final statistics
R4280 0      rno$V_s_log = [$BIT] ;                 ! /LOG explicitly specified
R4281 0
R4282 0      rno$V_msg_out = [$BIT] ;               ! put DSR messages in the output file
R4283 0      rno$V_msg_user = [$BIT] ;             ! send DSR messages to the user
R4284 0
R4285 0      rno$V_4_out_format = [$BITS(4)] ,      ! defines output formats
R4286 0
R4287 0      rno$V_2_output = [$BITS(2)] ,          ! output file requested
R4288 0      $OVERLAY ( rno$V_2_output )
R4289 0      rno$V_output = [$BIT] ;                ! output file requested
R4290 0      rno$V_s_output = [$BIT] ;              ! /OUTPUT explicitly specified
R4291 0
R4292 0      rno$V_2_overprint = [$BITS(2)] ;       ! overprint on same line
R4293 0      $OVERLAY ( rno$V_2_overprint )

```

```

R4294 0      rno$y_overprint    = [$BIT] ,
R4295 0      rno$y_s_overprint  = [$BIT] ;
R4296 0
R4297 0      rno$y_2_pause      = [$BITS(2)] ,
R4298 0      $OVERLAY ( rno$y_2_pause )
R4299 0      rno$y_pause       = [$BIT] ;
R4300 0      rno$y_s_pause      = [$BIT] ;
R4301 0
R4302 0      (NO free bits in OPTION2)
R4303 0
R4304 0      $OVERLAY ( rno$y_option3 )
R4305 0
R4306 0      rno$y_quick        = [$BIT] ,
R4307 0
R4308 0      rno$y_2_sequence    = [$BITS(2)] ,
R4309 0      $OVERLAY ( rno$y_2_sequence )
R4310 0      rno$y_sequence     = [$BIT] ;
R4311 0      rno$y_s_sequence   = [$BIT] ;
R4312 0
R4313 0      rno$y_2_simulate    = [$BITS(2)] ,
R4314 0      $OVERLAY ( rno$y_2_simulate )
R4315 0      rno$y_simulate     = [$BIT] ;
R4316 0      rno$y_s_simulate   = [$BIT] ;
R4317 0
R4318 0      rno$y_2_underline  = [$BITS(2)] ,
R4319 0      $OVERLAY ( rno$y_2_underline )
R4320 0      rno$y_underline    = [$BIT] ;
R4321 0      rno$y_s_underline  = [$BIT] ;
R4322 0
R4323 0      rno$y_2_und_separ   = [$BITS(2)] ,
R4324 0      $OVERLAY ( rno$y_2_und_separ )
R4325 0      rno$y_und_separ    = [$BIT] ;
R4326 0      rno$y_s_und_separ  = [$BIT] ;
R4327 0
R4328 0      rno$y_2_und_nonsp   = [$BITS(2)] ,
R4329 0      $OVERLAY ( rno$y_2_und_nonsp )
R4330 0      rno$y_und_nonsp    = [$BIT] ;
R4331 0      rno$y_s_und_nonsp  = [$BIT] ;
R4332 0
R4333 0      rno$y_und_char      = [$BIT] ,
R4334 0
R4335 0
R4336 0      (4 free bits in OPTION3)
R4337 0
R4338 0      $OVERLAY ( rno$y_option4 )
R4339 0
R4340 0      rno$y_ln01_ital_under = [$BIT] ,
R4341 0      rno$y_ln01_port_land = [$BIT] ,
R4342 0      rno$y_ln01_header   = [$BIT] ,
R4343 0      rno$y_ln01_load     = [$BIT] ,
R4344 0
R4345 0      rno$y_s_down        = [$BIT] ,
R4346 0      rno$y_s_right      = [$BIT] ;
R4347 0
R4348 0      (11 free bits in OPTION4)
R4349 0
R4350 0      $CONTINUE

```

```

! overprint on same line
! /OVERPRINT explicitly specified
!
! pause at page boundary requested
!
! pause at page boundary requested
! /PAUSE explicitly specified
!
! do quick processing (for contents, index)
!
! output sequence numbers requested
!
! output sequence numbers requested
! /SEQUENCE explicitly specified
!
! simulate printer form feeds
!
! simulate printer form feeds
! /SIMULATE explicitly specified
!
! underlining requested
!
! underlining requested: (default)
! /UNDERLINE explicitly specified
!
! underlining on separate line
!
! underlining on separate line
! /SEPARATE_UNDERLINE explicitly specified
!
! underlining non-spacing inline
!
! non-spacing inline
! /NONSPACING explicitly specified
!
! character specified (see below)

```

```

! Options for LN01 output:
!   set = italics, clear = underlining
!   set = portrait, clear = landscape
!   set = if header wanted in O/P file
!   set = loading of fonts is desired
!
! /DOWN explicitly specified
! /RIGHT explicitly specified

```

```

: R4351 0
: R4352 0 rno$c_change = [$BYTE] ; ! Change bar character (RNO$V_CHNG_CHAR set)
: R4353 0 rno$c_underline = [$BYTE] ; ! Underline character (RNO$V_UND_CHAR set)
: R4354 0
: R4355 0 rno$h_bold = [$SHORT_INTEGER] ; ! Bolding overprint count
: R4356 0 rno$h_dbg1 = [$SHORT_INTEGER] ; ! Debug flags, 1st word
: R4357 0 rno$h_dbg2 = [$SHORT_INTEGER] ; ! Debug flags, 2nd word
: R4358 0 rno$h_down = [$SHORT_INTEGER] ; ! Down shift count (number of lines)
: R4359 0 rno$h_right = [$SHORT_INTEGER] ; ! Right shift count (number of characters)
: R4360 0 rno$h_form_size = [$SHORT_INTEGER] ; ! Form size (number of lines)
: R4361 0
: R4362 0 TES;
: R4363 0
: R4364 0 LITERAL rno$k_cmd_len = $FIELD_SET_SIZE ; ! Length of RUNOFF command block
: R4365 0
: R4366 0 MACRO
MR4367 0 $rno_cmd =
MR4368 0 BLOCK [ rno$k_cmd_len ] FIELD ( $rno$cmd_fields )
: R4369 0 %;
: R4370 0
: R4371 0 !
: End of RNOMAC.REQ

```

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

H 10
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 159
(2)

; 4372 0 REQUIRE 'REQ:RUNHAN.REQ'; ! H_... directive literals

RUNHAN.REQ - Literal values of each directive.

Version: 'V04-000'

```
*****
*
*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
*  ALL RIGHTS RESERVED.
*
*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
*  ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
*  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
*  TRANSFERRED.
*
*  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
*  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
*  CORPORATION.
*
*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*****
```

++
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:

This require file defines the literals used to reference the
various DSR commands.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday CREATION DATE: 1978

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

J 10
15-Sep-1984 23:07:40
15-Sep-1984 22:54:15

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]RUNHAN.REQ;1 Page 161
(2)

R4413 0
R4414 0
R4415 0
R4416 0
R4417 0
R4418 0
R4419 0
R4420 0
R4421 0
R4422 0
R4423 0
R4424 0
R4425 0
R4426 0
R4427 0
R4428 0
R4429 0
R4430 0
R4431 0
R4432 0
R4433 0
R4434 0
R4435 0

MODIFIED BY:

014 KFA00014 Ken Alden 04-Aug-1983
Added H_DISABLE_APPEN, H_PAGE_NOW.
013 KFA00013 Ken Alden 03-Aug-1983
Added directive H_ENABLE_CHAPTER, H_DISABLE_CHAPTER (dsrplus).
012 RER00012 Ron Randall 17-Mar-1983
Made topnote-related text consistent with other modules.
011 KFA00011 Ken Alden 16-Mar-1983
Made SAVE/RESTORE visible to DSR.
010 KAD00010 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.
Made handler codes numerically ascending again through
their alphabetical order, including both DSR-only and
DSRPLUS commands. The DSRPLUS commands will still be
reported as errors for DSR.

--

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

K 10
15-Sep-1984 23:07:40
15-Sep-1984 22:54:15

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]RUNHAN.REQ;1 Page 162
(3)

```

R4436 0 LITERAL H_APPENDIX = 1:
R4437 0 LITERAL H_AUTOJUSTIFY = 2:
R4438 0 LITERAL H_AUTOPARAGRAPH = 3:
R4439 0 LITERAL H_AUTOSUBTITLE = 4:
R4440 0 LITERAL H_AUTOTABLE = 5:
R4441 0
UR4442 0 %IF DSRPLUS %THEN
UR4443 0 LITERAL H_AUTOTITLE = 6:
R4444 0 %FI
R4445 0
R4446 0 LITERAL H_BEGIN_BAR = 7:
R4447 0
UR4448 0 %IF DSRPLUS %THEN
UR4449 0 LITERAL H_BEGIN_TOPNOTE = 8:
UR4450 0 LITERAL H_BEGIN_PASSTHR = 9:
R4451 0 %FI
R4452 0
R4453 0 LITERAL H_BLANK = 10:
R4454 0 LITERAL H_BREAK = 11:
R4455 0 LITERAL H_CENTER = 12:
R4456 0 LITERAL H_CHAPTER = 13:
R4457 0 LITERAL H_COMMENT = 14:
R4458 0 LITERAL H_CONTROL_CHARA = 15:
R4459 0
UR4460 0 %IF DSRPLUS %THEN
UR4461 0 LITERAL H_REFERENCEPOIN = 16:
R4462 0 %FI
R4463 0
R4464 0 LITERAL H_DATE = 17:
R4465 0
UR4466 0 %IF DSRPLUS %THEN
UR4467 0 LITERAL H_DISABLE_APPEN = 214:
R4468 0 %FI
R4469 0
R4470 0 LITERAL H_DISABLE_BAR = 18:
R4471 0 LITERAL H_DISABLE_BOLD! = 19:
R4472 0
UR4473 0 %IF DSRPLUS %THEN
UR4474 0 LITERAL H_DISABLE_CHAPT = 212;! Same as H_no_chapter
R4475 0 %FI
R4476 0
R4477 0 LITERAL H_DISABLE_HYPHE = 20:
R4478 0 LITERAL H_DISABLE_INDEX = 21:
R4479 0 LITERAL H_DISABLE_OVERS = 22:
R4480 0 LITERAL H_DISABLE_TOC = 23:
R4481 0 LITERAL H_DISABLE_UNDER = 24:
R4482 0
UR4483 0 %IF DSRPLUS %THEN
UR4484 0 LITERAL H_DISABLE_XPLUS = 25:
R4485 0 %FI
R4486 0
R4487 0 LITERAL H_DISPLAY_APPEN = 26:
R4488 0 LITERAL H_DISPLAY_CHAPT = 27:
R4489 0
UR4490 0 %IF DSRPLUS %THEN
UR4491 0 LITERAL H_DISPLAY_COUNT = 28:
R4492 0 %FI

```


FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

L 10
15-Sep-1984 23:07:40
15-Sep-1984 22:54:15

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]RUNHAN.REQ;1 Page 163
(3)

```

R4493 0
R4494 0 LITERAL H_DISPLAY_DAY = 29;
R4495 0 LITERAL H_DISPLAY_ELEME = 30;
R4496 0
UR4497 0 %IF DSRPLUS %THEN
UR4498 0 LITERAL H_DISPLAY_EXAMP = 31;
UR4499 0 LITERAL H_DISPLAY_FIGUR = 32;
UR4500 0 LITERAL H_DISPLAY_HEAD = 33;
R4501 0 %FI
R4502 0
R4503 0 LITERAL H_DISPLAY_HOURS = 34;
R4504 0 LITERAL H_DISPLAY_LEVEL = 35;
R4505 0 LITERAL H_DISPLAY_MINUT = 36;
R4506 0 LITERAL H_DISPLAY_MONTH = 37;
R4507 0 LITERAL H_DISPLAY_NUMBE = 38;
R4508 0 LITERAL H_DISPLAY_SECON = 39;
R4509 0 LITERAL H_DISPLAY_SUBPA = 40;
R4510 0
UR4511 0 %IF DSRPLUS %THEN
UR4512 0 LITERAL H_DISPLAY_TABLE = 41;
R4513 0 %FI
R4514 0
R4515 0 LITERAL H_DISPLAY_YEAR = 42;
R4516 0 LITERAL H_DO_INDEX = 43;
R4517 0
UR4518 0 %IF DSRPLUS %THEN
UR4519 0 LITERAL H_DO_CONTENTS = 44;
UR4520 0 LITERAL H_DO_TABLE = 45;
R4521 0 %FI
R4522 0
R4523 0 LITERAL H_ELSE = 46;
R4524 0
UR4525 0 %IF DSRPLUS %THEN
UR4526 0 LITERAL H_ENABLE_APPEND = 213;
R4527 0 %FI
R4528 0
R4529 0 LITERAL H_ENABLE_BAR = 47;
R4530 0 LITERAL H_ENABLE_BOLDIN = 48;
R4531 0
UR4532 0 %IF DSRPLUS %THEN
UR4533 0 LITERAL H_ENABLE_CHAPTE = 211;
R4534 0 %FI
R4535 0
R4536 0 LITERAL H_ENABLE_HYPHEN = 49;
R4537 0 LITERAL H_ENABLE_INDEXI = 50;
R4538 0 LITERAL H_ENABLE_OVERST = 51;
R4539 0
UR4540 0 %IF DSRPLUS %THEN
UR4541 0 LITERAL H_ENABLE_XPLUS = 52;
R4542 0 %FI
R4543 0
R4544 0 LITERAL H_ENABLE_TOC = 53;
R4545 0 LITERAL H_ENABLE_UNDERL = 54;
R4546 0 LITERAL H_ENDIF = 55;
R4547 0 LITERAL H_END_BAR = 56;
R4548 0 LITERAL H_END_FOOTNOTE = 57;
R4549 0

```

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

M 10
15-Sep-1984 23:07:40
15-Sep-1984 22:54:15

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]RUNHAN.REQ;1 Page 164
(3)

```

: UR4550 0 %IF DSRPLUS %THEN
: UR4551 0 LITERAL H_END_TOPNOTE = 58;
: R4552 0 %FI
: R4553 0
: R4554 0 LITERAL H_END_LIST = 59;
: R4555 0 LITERAL H_END_LITERAL = 60;
: R4556 0 LITERAL H_END_NOTE = 61;
: R4557 0
: UR4558 0 %IF DSRPLUS %THEN
: UR4559 0 LITERAL H_END_PASSTHROU = 62;
: R4560 0 %FI
: R4561 0
: R4562 0 LITERAL H_END_SUBPAGE = 63;
: R4563 0 LITERAL H_ENTRY = 64;
: R4564 0 LITERAL H_FIGURE = 65;
: R4565 0 LITERAL H_FIGURE_DEFERR = 66;
: R4566 0 LITERAL H_FILL = 67;
: R4567 0 LITERAL H_FIRST_TITLE = 68;
: R4568 0
: UR4569 0 %IF DSRPLUS %THEN
: UR4570 0 LITERAL H_FIRST_TITLE_A = 69;
: R4571 0 %FI
: R4572 0
: R4573 0 LITERAL H_FLAGS_ALL = 70;
: R4574 0 LITERAL H_FLAGS_BOLD = 71;
: R4575 0 LITERAL H_FLAGS_BREAK = 72;
: R4576 0 LITERAL H_FLAGS_CAPITAL = 73;
: R4577 0 LITERAL H_FLAGS_COMMENT = 74;
: R4578 0 LITERAL H_FLAGS_CONTROL = 75;
: R4579 0 LITERAL H_FLAGS_ENDFOOT = 76;
: R4580 0 LITERAL H_FLAGS_HYPHENA = 77;
: R4581 0 LITERAL H_FLAGS_INDEX = 78;
: R4582 0 LITERAL H_FLAGS_LOWERCA = 79;
: R4583 0 LITERAL H_FLAGS_OVERSTR = 80;
: R4584 0
: UR4585 0 %IF DSRPLUS %THEN
: UR4586 0 LITERAL H_FLAGS_NOPERMU = 81;
: UR4587 0 LITERAL H_FLAGS_PASSTHR = 82;
: R4588 0 %FI
: R4589 0
: R4590 0 LITERAL H_FLAGS_PERIOD = 83;
: R4591 0 LITERAL H_FLAGS_QUOTE = 84;
: R4592 0 LITERAL H_FLAGS_SPACE = 85;
: R4593 0 LITERAL H_FLAGS_SUBINDE = 86;
: R4594 0 LITERAL H_FLAGS_SUBSTIT = 87;
: R4595 0 LITERAL H_FLAGS_UNDERLI = 88;
: R4596 0 LITERAL H_FLAGS_UPPERCA = 89;
: R4597 0 LITERAL H_FOOTNOTE = 90;
: R4598 0 LITERAL H_HEADERS_LOWER = 91;
: R4599 0 LITERAL H_HEADERS_MIXED = 92;
: R4600 0 LITERAL H_HEADERS_ON = 93;
: R4601 0 LITERAL H_HEADERS_UPPER = 94;
: R4602 0
: UR4603 0 %IF DSRPLUS %THEN
: UR4604 0 LITERAL H_HEADER_EXAMPL = 95;
: UR4605 0 LITERAL H_HEADER_FIGURE = 96;
: R4606 0 %FI

```

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

N 10
15-Sep-1984 23:07:40
15-Sep-1984 22:54:15

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]RUNHAN.REQ;1 Page 165
(3)

```

R4607 0
R4608 0 LITERAL H_HEADER_LEVEL = 97;
R4609 0
UR4610 0 %IF DSRPLUS %THEN
UR4611 0 LITERAL H_HEADER_TABLE = 98;
UR4612 0 LITERAL H_TOPNOTE_ON = 99;
R4613 0 %FI
R4614 0
R4615 0 LITERAL H_HYPHENATION = 100;
R4616 0 LITERAL H_IF = 101;
R4617 0 LITERAL H_IFNOT = 102;
R4618 0 LITERAL H_INDENT = 103;
R4619 0 LITERAL H_INDEX = 104;
R4620 0 LITERAL H_JUSTIFY = 105;
R4621 0 LITERAL H_KEEP = 106;
R4622 0 LITERAL H_LAYOUT = 107;
R4623 0 LITERAL H_LEF = 108;
R4624 0 LITERAL H_LEF1_MARGIN = 109;
R4625 0 LITERAL H_LIST = 110;
R4626 0 LITERAL H_LIST_ELEMENT = 111;
R4627 0 LITERAL H_LITERAL = 112;
R4628 0 LITERAL H_LOWER_CASE = 113;
R4629 0 LITERAL H_NOTE = 114;
R4630 0 LITERAL H_NO_AUTOJUSTIF = 115;
R4631 0 LITERAL H_NO_AUTOPARAGR = 116;
R4632 0 LITERAL H_NO_AUTOSUBTIT = 117;
R4633 0 LITERAL H_NO_AUTOTABLE = 118;
R4634 0
UR4635 0 %IF DSRPLUS %THEN
UR4636 0 LITERAL H_NO_AUTOTITLE = 119;
UR4637 0 LITERAL H_NO_CHAPTER = 120;
R4638 0 %FI
R4639 0
R4640 0 LITERAL H_NO_CONTROL_CH = 121;
R4641 0 LITERAL H_NO_DATE = 122;
R4642 0 LITERAL H_NO_FILL = 123;
R4643 0 LITERAL H_NO_FLAGS_ALL = 124;
R4644 0 LITERAL H_NO_FLAGS_BOLD = 125;
R4645 0 LITERAL H_NO_FLAGS_BREA = 126;
R4646 0 LITERAL H_NO_FLAGS_CAPI = 127;
R4647 0 LITERAL H_NO_FLAGS_COMM = 128;
R4648 0 LITERAL H_NO_FLAGS_CONT = 129;
R4649 0 LITERAL H_NO_FLAGS_ENDF = 130;
R4650 0 LITERAL H_NO_FLAGS_HYPH = 131;
R4651 0 LITERAL H_NO_FLAGS_INDE = 132;
R4652 0 LITERAL H_NO_FLAGS_LOWE = 133;
R4653 0 LITERAL H_NO_FLAGS_OVER = 134;
R4654 0
UR4655 0 %IF DSRPLUS %THEN
UR4656 0 LITERAL H_NO_FLAGS_NOPE = 135;
UR4657 0 LITERAL H_NO_FLAGS_PASS = 136;
R4658 0 %FI
R4659 0
R4660 0 LITERAL H_NO_FLAGS_PERI = 137;
R4661 0 LITERAL H_NO_FLAGS_QUOT = 138;
R4662 0 LITERAL H_NO_FLAGS_SPAC = 139;
R4663 0 LITERAL H_NO_FLAGS_SUBI = 140;
```

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

B 11
15-Sep-1984 23:07:40
15-Sep-1984 22:54:15

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]RUNHAN.REQ;1 Page 166
(3)

R4664	0	LITERAL H_NO_FLAGS_SUBS =	141;
R4665	0	LITERAL H_NO_FLAGS_UNDE =	142;
R4666	0	LITERAL H_NO_FLAGS_UPPE =	143;
R4667	0	LITERAL H_NO_HEADERS =	144;
R4668	0	LITERAL H_NO_TOPNOTE =	145;
R4669	0	LITERAL H_NO_HYPHENATIO =	146;
R4670	0	LITERAL H_NO_KEEP =	147;
R4671	0	LITERAL H_NO_JUSTIFY =	148;
R4672	0	LITERAL H_NO_NUMBER =	149;
R4673	0		
UR4674	0	%IF DSRPLUS %THEN	
UR4675	0	LITERAL H_NO_NUMBER_FOO =	150;
R4676	0	%FI	
R4677	0		
R4678	0	LITERAL H_NO_PAGING =	151;
R4679	0	LITERAL H_NO_PERIOD =	152;
R4680	0	LITERAL H_NO_SPACE =	153;
R4681	0	LITERAL H_NO_SUBTITLE =	154;
R4682	0	LITERAL H_NUMBER_APPEND =	155;
R4683	0	LITERAL H_NUMBER_CHAPTE =	156;
R4684	0		
UR4685	0	%IF DSRPLUS %THEN	
UR4686	0	LITERAL H_NUMBER_EXAMPL =	157;
UR4687	0	LITERAL H_NUMBER_FIGURE =	158;
UR4688	0	LITERAL H_NUMBER_FOOTNO =	159;
R4689	0	%FI	
R4690	0		
R4691	0	LITERAL H_NUMBER_INDEX =	160;
R4692	0	LITERAL H_NUMBER_LEVEL =	161;
R4693	0	LITERAL H_NUMBER_LIST =	162;
R4694	0	LITERAL H_NUMBER_PAGE =	163;
R4695	0	LITERAL H_NUMBER_RUNNIN =	164;
R4696	0	LITERAL H_NUMBER_SUBPAG =	165;
R4697	0		
UR4698	0	%IF DSRPLUS %THEN	
UR4699	0	LITERAL H_NUMBER_TABLE =	166;
R4700	0	%FI	
R4701	0		
R4702	0	LITERAL H_PAGE =	167;
R4703	0		
UR4704	0	%IF DSRPLUS %THEN	
UR4705	0	LITERAL H_PAGE_NOW =	215;
R4706	0	%FI	
R4707	0		
R4708	0	LITERAL H_PAGE_SIZE =	168;
R4709	0	LITERAL H_PAGING =	169;
R4710	0	LITERAL H_PARAGRAPH =	170;
R4711	0	LITERAL H_PERIOD =	171;
R4712	0	LITERAL H_PRINT_INDEX =	172;
R4713	0	LITERAL H_REPEAT =	173;
R4714	0	LITERAL H_REQUIRE =	174;
R4715	0	LITERAL H_RESTORE =	175;
R4716	0	LITERAL H_RIGHT =	176;
R4717	0	LITERAL H_RIGHT_MARGIN =	177;
R4718	0	LITERAL H_SAVE =	178;
R4719	0	LITERAL H_SAVE_ALL =	179;
R4720	0		

```

UR4721 0 %IF DSRPLUS %THEN
UR4722 0 LITERAL H_SEND_CONTENTS = 180;
R4723 0 %FI
R4724 0
R4725 0 LITERAL H_SEND_TOC = 181;
R4726 0
UR4727 0 %IF DSRPLUS %THEN
UR4728 0 LITERAL H_SET_COUNTER = 182;
R4729 0 %FI
R4730 0
R4731 0 LITERAL H_SET_DATE = 183;
R4732 0 LITERAL H_SET_LEVEL = 184;
R4733 0 LITERAL H_SET_PARAGRAPH = 185;
R4734 0
UR4735 0 %IF DSRPLUS %THEN
UR4736 0 LITERAL H_SET_TEXTSTRIN = 186;
R4737 0 %FI
R4738 0
R4739 0 LITERAL H_SET_TIME = 187;
R4740 0 LITERAL H_SKIP = 188;
R4741 0 LITERAL H_SPACING = 189;
R4742 0 LITERAL H_STANDARD = 190;
R4743 0
UR4744 0 %IF DSRPLUS %THEN
UR4745 0 LITERAL H_STYLE_APPENDI = 191;
UR4746 0 LITERAL H_STYLE_CHAPTER = 192;
R4747 0 %FI
R4748 0
R4749 0 LITERAL H_STYLE_DATE = 193;
R4750 0
UR4751 0 %IF DSRPLUS %THEN
UR4752 0 LITERAL H_STYLE_EXAMPLE = 194;
UR4753 0 LITERAL H_STYLE_FIGURE = 195;
R4754 0 %FI
R4755 0
R4756 0 LITERAL H_STYLE_HEADERS = 196;
R4757 0
UR4758 0 %IF DSRPLUS %THEN
UR4759 0 LITERAL H_STYLE_TABLE = 197;
R4760 0 %FI
R4761 0
R4762 0 LITERAL H_STYLE_TIME = 198;
R4763 0 LITERAL H_SUBINDEX = 199;
R4764 0 LITERAL H_SUBPAGE = 200;
R4765 0 LITERAL H_SUBTITLE = 201;
R4766 0 LITERAL H_TAB_STOPS = 202;
R4767 0 LITERAL H_TEST_PAGE = 203;
R4768 0 LITERAL H_TITLE = 204;
R4769 0 LITERAL H_UPPER_CASE = 205;
R4770 0 LITERAL H_VARIABLE = 206;
R4771 0 LITERAL H_XLOWER = 207;
R4772 0
UR4773 0 %IF DSRPLUS %THEN
UR4774 0 LITERAL H_XPLUS = 208;
R4775 0 %FI
R4776 0
R4777 0 LITERAL H_XUPPER = 209;

```

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

D 11
15-Sep-1984 23:07:40
15-Sep-1984 22:54:15

VAX-11 Bliss-32 V4.0-742 Page 168
_S255SDUA28:[RUNOFF.SRC]RUNHAN.REQ;1 (3)

```
: R4778 0
: UR4779 0 %IF DSRPLUS %THEN
: UR4780 0 LITERAL H_YPLUS = 210;
: R4781 0 %FI
: R4782 0
: R4783 0 LITERAL FIRST_COMMAND = 1;
: R4784 0 LITERAL LAST_COMMAND = 215;
: R4785 0
: R4786 0 ! End of RUNHAN.REQ
```

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

E 11
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 169
()

; 4787 0 REQUIRE 'REQ:SAVE.REQ'; ! Save and Restore definitions

Version: 'V04-000'

COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
ALL RIGHTS RESERVED.

THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
TRANSFERRED.

THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
CORPORATION.

DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.

FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:

This require file defines part of the storage area for the .SAVE
commands. Whole structures that will be saved will remain as they
are; this Require file just defines the additional area for the
single items. Items declared in the SAVE area do not also appear in
the SAVEALL area because the SAVEALL area includes all that is in
the SAVE area.

ENVIRONMENT: Transportable BLISS

AUTHOR: Ken Alden

CREATION DATE: December 1982

MODIFIED BY:

007 REM00007 Ray Marshall 1-June-1984
Completely reworked the definitions of SAVE_LENGTH &
SAVEALL_LENGTH. At least one size was wrong and hard coded
values were used where a %SIZE could have been used. Now
%SIZE is used for most of the items. Also, the XPD_ items
are now conditionalized for DSRPLUS.

006 KFA00006 Ken Alden 30-Sep-1983
Moved the HCT items to the .SAVE list and three SCA items to
the .SAVE ALL item block.

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

6 11
15-Sep-1984 23:07:40
15-Sep-1984 22:54:24

VAX-11 B:iss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]SAVE.REQ;1

Page 171
(1)

R4845 0
R4846 0
R4847 0
R4848 0
R4849 0
R4850 0
R4851 0
R4852 0
R4853 0
R4854 0
R4855 0

005 KFA00005 Ken Alden 27-Jul-1983
Added gca_flag_cmd to the save list.
004 KFA00004 Ken Alden 5-Jul-1983
Added SCA_FLAGS to the save list.
003 KAD00003 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.
--

```

: R4856 0 $FIELD SAVE_FIELDS =
: R4857 0 SET
: R4858 0 save$g_sca_cc_ok = [$INTEGER],
: R4859 0 save$g_sca_justify = [$INTEGER],
: R4860 0 save$g_sca_fill = [$INTEGER],
: R4861 0 save$g_sca_crock = [$INTEGER],
: R4862 0 save$g_sca_lm = [$INTEGER],
: R4863 0 save$g_sca_rm = [$INTEGER],
: R4864 0 save$g_sca_spacing = [$INTEGER],
: R4865 0 save$g_sca_ker = [$INTEGER],
: R4866 0 save$g_sca_autotitle = [$INTEGER],
: R4867 0 save$g_sca_flags = [$INTEGER],
: R4868 0 save$g_gca_width = [$INTEGER],
: R4869 0 save$g_gca_flag_cmd = [$INTEGER],
: R4870 0 save$g_gca_keep = [$INTEGER],
: R4871 0 save$g_hct_hd_case = [$INTEGER],
: R4872 0 save$g_hct_date = [$INTEGER],
: R4873 0 save$g_hct_headers = [$INTEGER],
: R4874 0 save$g_hct_nmpg_np = [$INTEGER],
: R4875 0 save$g_hct_number_pag = [$INTEGER],
: R4876 0 save$g_hct_subtitle = [$INTEGER],
: R4877 0 save$g_phan_llines = [$INTEGER],
: R4878 0 TES;
: R4879 0
: R4880 0 LITERAL
: R4881 0 save$k_length = $FIELD_SET_SIZE;
: R4882 0
: R4883 0 MACRO
: MR4884 0 $save_block =
: R4885 0 BLOCK [save$k_length] FIELD (save_fields) %;
: R4886 0
: R4887 0 $FIELD saveall_fields =
: R4888 0 SET
: R4889 0 saveall$g_gca_autojust = [$INTEGER],
: R4890 0 saveall$g_gca_autopara = [$INTEGER],
: R4891 0 saveall$g_gca_autosubt = [$INTEGER],
: R4892 0 saveall$g_gca_autotabl = [$INTEGER],
: R4893 0 saveall$g_gca_case = [$INTEGER],
: R4894 0 saveall$g_gca_xcase = [$INTEGER],
: R4895 0 saveall$g_phan_header = [$INTEGER],
: R4896 0 saveall$g_phan_paging = [$INTEGER],
: R4897 0 saveall$g_sca_cc_ok = [$INTEGER],
: R4898 0 saveall$g_sca_bar_char = [$INTEGER],
: R4899 0 saveall$g_sca_period = [$INTEGER],
: R4900 0 TES;
: R4901 0
: R4902 0 LITERAL
: R4903 0 saveall$k_length = $FIELD_SET_SIZE;
: R4904 0
: R4905 0 MACRO
: MR4906 0 $saveall_block =
: R4907 0 BLOCK [saveall$k_length] FIELD (saveall_fields) %;
: R4908 0
: R4909 0 MACRO
: MR4910 0 $XWDS (defined as) =
: R4911 0 $SIZE(defined_as)/%UPVAL %;
: R4912 0

```

```

R4913 0
R4914 0
R4915 0
R4916 0
R4917 0
R4918 0
R4919 0
R4920 0
R4921 0
R4922 0
CR4923 0
CR4924 0
CR4925 0
CR4926 0
CR4927 0
R4928 0
R4929 0
R4930 0
R4931 0
R4932 0
R4933 1
UR4934 1
UR4935 1
UR4936 1
R4937 0
R4938 0
CR4939 0
CR4940 0
CR4941 0
R4942 0

LITERAL
    ! Counting %BPVALs (or fullwords) since the size of this literal
    ! is in %BPVALs.
    save_length = $XWDS(flag_table [flag_count]) ! The flag table.
    + $XWDS(COUNTED_LIST [max_tabs]) ! The TAB table
    + $XWDS(atable_definition) ! The Action TABLE
    + $XWDS(VECTOR [pdt_size]) ! paragraph definition tables
    + save$length, ! SAVE block

%(
    save_length = (flag_count * 2) ! Each flag uses Two fullwords
    + max_tabs+2 ! maximum tabs plus two control words
    + CH$ALLOCATION(atable_length) ! Each Action TABLE entry is one byte
    + pdt_size ! paragraph definition tables
    + $XWDS($save_block), ! SAVE block
)%

saveall_length = save_length ! Size of SAVE structure
+ saveall$length ! SAVEALL block
+ 6 ! for DATTIM
+ $xwds(counted_list [max_levels]) ! for HLLIST
+ (max_ecc * ecc$length) ! for ECC

%IF DSRPLUS %THEN
    + 1 ! for XPD_FLAGS
    + $xwds(fixed_string [xp_string_size]) ! for XPD_APPEND
%FI

%( Alternate definitions:
    + max_levels+2 ! for HLLIST
    + (xp_string_size/%UPVAL)+4 ! for XPD_APPEND
)%

```

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

J 11
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 174
(2)

: 4943 0 REQUIRE 'REQ:SAVSTK.REQ'; ! Save and Restore stack

Version: 'V04-000'

```
*****
*
*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
*  ALL RIGHTS RESERVED.
*
*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
*  ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
*  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
*  TRANSFERRED.
*
*  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
*  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
*  CORPORATION.
*
*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*
*****
```

++
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
Defines the storage area for the .SAVE commands.

ENVIRONMENT: Transportable BLISS

AUTHOR: Ken Alden

CREATION DATE: December 1982

MODIFIED BY:

002 KAD00002 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.

--
LITERAL

stksav_size	= 30,	! We store up to 30 .SAVEs to record trans.
savstk_size	= 20,	! Up to 20 levels of .SAVEs
savstk_depth	= -1,	! Index into the SAVSTK where the current depth is saved.
savstk_address	= 0,	! Index to starting address of the save block.
savstk_source	= 1,	! The handler_code of the command that made this entry.
savstk_req_d	= 2,	! .REQUIRE depth at which .IF must terminate
savstk_ipagen	= 3,	! Input file page number
savstk_iseqn	= 4,	! Input file sequence number.
savstk_fspecp	= 5,	! A reference to the file spec where the command occurred.

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

L 11
15-Sep-1984 23:07:40
15-Sep-1984 22:54:27

VAX-11 Bliss-32 V4.0-742
_S255\$DUA28:[RUNOFF.SRC]SAVSTK.REQ;1 Page 176
(1)

```
: R5001 0      savstk_fspecc      = 6;      ! Length of file spec of above.
: R5002 0
: R5003 0      LITERAL
: R5004 0      savstk_item_count = 7;      !Number of pieces of info in SAVSTK.
: R5005 0
: R5006 0      STRUCTURE
: R5007 0      savstack [i,j;n=stksav_size,m=savstk_item_count] =
: R5008 0      [%UPVAL*( m*n + 1 + 8 )]      ? Leave room for the 0th nesting level.
: R5009 2      (savstack + (IF j EQL savstk_depth
: R5010 2      THEN 0
: R5011 0      ELSE %UPVAL*(1 + m*i + j) ) );
: R5012 0
: R5013 0      !
:                               End of SAVSTK.REQ
```

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

M 11
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 177
(2)

: 5014 0 REQUIRE 'REQ:SCA.REQ'; ! SCA_... Scanner and translator control items

Version: 'V04-000'

```
*****
*
*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
*  ALL RIGHTS RESERVED.
*
*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
*  ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
*  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
*  TRANSFERRED.
*
*  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
*  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
*  CORPORATION.
*
*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*
*****
```

++
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS
ABSTRACT: Definitions having to do with SCA (SCANT control area).

ENVIRONMENT: Compatible BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

016	REM00016	Ray Marshall	16-November-1983
	Added macros with 'f' within their names and defining cells so they can be loaded by Ken's SAVRES module using macro names instead of numeric offsets.		
015	REM00015	Ray Marshall	7-November-1983
	Added 12 more cells to the case rules section to support case changing within the DEC multinational character set. This also required renumbering the whole table!		
014	KFA00014	Ken Alden	18-Sep-1983
	For DSRPLUS: added sca_margin_pad.		
013A	KFA00013A	Ken Alden	30-Sep-1983
	Comment changes only; for three items that moved from save to save all.		

R5072	0			
R5073	0			
R5074	0	013	KFA00013	Ken Alden 13-Sep-1983
R5075	0		For DSRPLUS: Added SCA_WRD_PASS to the SCA_PASS word [35]	
R5076	0		and made SCA_PASS into a bit.	
R5077	0	012	KFA00012	Ken Alden 05-Jul-1983
R5078	0		added SCA_FLAGS to the save list.	
R5079	0			
R5080	0	011	KFA00011	Ken Alden 15-Mar-1983
R5081	0		For DSRPLUS: added SCA[35] SCA_PASS for flags passthrough	
R5082	0		For DSR: Extended SAVE & RESTORE capability.	
R5083	0			
R5084	0	010	KAD00010	Keith Dawson 07-Mar-1983
R5085	0		Global edit of all modules. Updated module names, idents,	
R5086	0		copyright dates. Changed require files to BLISS library.	
R5087	0			
R5088	0	--		

MACRO

```

R5089 0
R5090 0
R5091 0
R5092 0
R5093 0
R5094 0
R5095 0
R5096 0
R5097 0
R5098 0
R5099 0
R5100 0
R5101 0
R5102 0
R5103 0
R5104 0
R5105 0
R5106 0
R5107 0
R5108 0
R5109 0
R5110 0
R5111 0
R5112 0
R5113 0
R5114 0
R5115 0
R5116 0
R5117 0
R5118 0
R5119 0
R5120 0
R5121 0
R5122 0
R5123 0
R5124 0
R5125 0
R5126 0
R5127 0
R5128 0
R5129 0
R5130 0
R5131 0
R5132 0
R5133 0
R5134 0
R5135 0
R5136 0
R5137 0
R5138 0
R5139 0
R5140 0
R5141 0
R5142 0
R5143 0
R5144 0
R5145 0

SCA_FC_UT = SCA[00]%,      !Save case rules here when
SCA_OC_UT = SCA[01]%,      !exceptions are set up.
SCA_FC_LT = SCA[02]%,      ...
SCA_OC_LT = SCA[03]%,      ...
SCA_WRD_FC_UT = SCA[04]%,  !Case rules for current word.
SCA_WRD_FC_LT = SCA[05]%,  ...
SCA_WRD_OC_UT = SCA[06]%,  ...
SCA_WRD_OC_LT = SCA[07]%,  ...
SCA_FCBE_UT = SCA[08]%,    !Default case rules.
SCA_OCBE_UT = SCA[09]%,    ...
SCA_FCBE_LT = SCA[10]%,    ...
SCA_OCBE_LT = SCA[11]%,    ...
SCA_MNFC_UT = SCA[12]%,    !Save case rules here when
SCA_MNOC_UT = SCA[13]%,    !exceptions are set up.
SCA_MNFC_LT = SCA[14]%,    ...
SCA_MNOC_LT = SCA[15]%,    ...
SCA_MNWRD_FC_UT = SCA[16]%, !Case rules for current word.
SCA_MNWRD_FC_LT = SCA[17]%, ...
SCA_MNWRD_OC_UT = SCA[18]%, ...
SCA_MNWRD_OC_LT = SCA[19]%, ...
SCA_MNFCBE_UT = SCA[20]%,  !Default case rules.
SCA_MNOCBE_UT = SCA[21]%,  ...
SCA_MNFCBE_LT = SCA[22]%,  ...
SCA_MNOCBE_LT = SCA[23]%,  ...
SCA_WORD_SET = SCA[24]%,   !TRUE if case rules set for a word only.

!*****
!Everything above this point is counted in SCA_CASE_SIZE.

SCA_JUSTIFY = .SCA[25]%,    !(SAVE)TRUE if text should be justified.
SCA_f_JUSTIFY = SCA[25]%,
SCA_FILL = .SCA[26]%,      !(SAVE)TRUE if filling lines.
SCA_f_FILL = SCA[26]%,
SCA_CC_OK = .SCA[27]%,     !(SAVE ALL)TRUE if control characters allowed in input file
SCA_f_CC_OK = SCA[27]%,
SCA_CROCK = .SCA[28]%,     !(SAVE)See FJNFNJ for explanation.
SCA_f_CROCK = SCA[28]%,
SCA_LM = .SCA[29]%,        !(SAVE)The left margin.
SCA_f_LM = SCA[29]%,
SCA_RM = .SCA[30]%,        !(SAVE)The right margin.
SCA_f_RM = SCA[30]%,
SCA_SPACING = .SCA[31]%,   !(SAVE)1+number of blank lines between lines of text.
SCA_f_SPACING = SCA[31]%,
SCA_PERIOD = .SCA[32]%,   !(SAVE ALL)TRUE if double spacing after ".?!;:"
SCA_f_PERIOD = SCA[32]%,
SCA_KER = .SCA[33]%,       !(SAVE)TRUE if empty records have significance.
SCA_f_KER = SCA[33]%,
SCA_BAR_CHAR = .SCA[34]%,  !(SAVE ALL)Change bar character to be used if enabled.
SCA_f_BAR_CHAR = SCA[34]%,
SCA_AUTOTITLE = .SCA[35]%, !(SAVE)TRUE if .AUTOTITLE is in effect.
SCA_f_AUTOTITLE = SCA[35]%,
SCA_FLAGS = .SCA[36]%,    !TRUE if flags are enabled.
SCA_f_FLAGS = SCA[36]%,

!***** end of save area *****

SCA_FC = SCA[37]%,        !TRUE if first character on the line.

```

```

R5146 0      SCA_NBITS      = SCA[38]%,      !SEE BELOW
R5147 0      SCA_X_FLAG    = SCA[39]%,      !TRUE if in the middle of a sequence
R5148 0                                     !marked by the <INDEX flag>
R5149 0      SCA_FRC_CASE  = SCA[40]%,      !TRUE if case of current
R5150 0                                     !word was forced.
R5151 0      SCA_CONT      = SCA[41]%,      !TRUE if user said .NO SPACE
R5152 0      SCA_DO_NBITS  = SCA[42]%,      !SEE BELOW
R5153 0      SCA_PRESCAN  = SCA[43]%,      !See SCANT for explanation
R5154 0      SCA_HEADER    = SCA[44]%,      !Used by FLIP -- True if
R5155 0                                     !collecting a header level.
R5156 0      SCA_SECT_EMPTY = SCA[45]%,      !TRUE if nothing in current section.
R5157 0      SCA_XROUTINE  = SCA[46]%,      !Indicates which routine to call for indexing:
R5158 0                                     !FALSE ==> XR, TRUE ==> SUBXR.
UR5159 0      !IF DSRPLUS THEN
UR5160 0      SCA_PASS     = (SCA[47])<0,1>%, !TRUE user is passing escape
UR5161 0                                     !sequences.
UR5162 0      SCA_WRD_PASS = (SCA[47])<1,1>%, !TRUE user is passing escape
UR5163 0                                     !sequences along with this word.
UR5164 0      SCA_MARGIN_PAD = (SCA[47])<8,8>%, !Number of spaces added at the
UR5165 0                                     !beginning of MRA.
R5166 0      !F1
R5167 0      !...
R5168 0      SCA_WRD_NBITS  = SCA[48]%,      !SEE BELOW
R5169 0      SCA_WRD_CNBITS = SCA[49]%,      !SEE BELOW
R5170 0      SCA_WRD_ACNBITS = SCA[50]%,      !SEE BELOW
R5171 0      SCA_RSKIPS    = SCA[51]%,      !TRUE if multiple spaces/tabs are to
R5172 0                                     !be skipped.
R5173 0      !...
R5174 0      SCA_FC_CASE   = SCA[52]%,      !TRUE if case rules to be used are
R5175 0                                     !those for the first character of a word.
R5176 0      SCA_INDEX     = SCA[53]%,      !TRUE if indexing commands are to be obeyed.
R5177 0      SCA_FRC_CHR   = SCA[54]%,      !True if current character should not be translated.
R5178 0      SCA_INDENT    = SCA[55]%,      !Pending indentation.
R5179 0      SCA_PARA_PND  = SCA[56]%,      !TRUE if a paragraph is pending.
R5180 0      !...
R5181 0      !
R5182 0      !Everything below this point refers to the word currently being
R5183 0      !scanned.
R5184 0      !*****
R5185 0      SCA_WRD_PNTR   = SCA[62]%,      !A CH$PTR to the first character of the word.
R5186 0      SCA_WRD_INT_L  = SCA[63]%,      !Internal representation size so far.
R5187 0      SCA_WRD_EXT_L  = SCA[64]%,      !External size (i.e., print positions)
R5188 0      SCA_WRD_ISEQN  = SCA[65]%,      !Input line counter or record number.
R5189 0      SCA_WRD_DRAFT  = SCA[66]%,      !TRUE if word is inside a /DRAFT area.
R5190 0      SCA_WRD_DRAFT_F = SCA[67]%,      !The draft flag for this word.
R5191 0      SCA_WRD_BARS   = (SCA[68])<BAR->%, !TRUE if change bars associated with this word.
R5192 0      SCA_WRD_BAR_CHR = SCA[69]%,      !Use this character as the change bar.
R5193 0      SCA_WRD_CPEND  = SCA[70]%,      !Character being worked on.
R5194 0      SCA_WRD_SEQN_F = SCA[71]%,      !TRUE if SCA_WRD_ISEQN is an SOS style record number.
R5195 0      SCA_WRD_IPAGEN = SCA[72]%,      !Input page number.
R5196 0      SCA_WRD_FOOTW  = SCA[73]%,      !The number of footnotes attached to
R5197 0      !this word.
R5198 0      SCA_WRD_F_XTN  = SCA[74]%,      !First transaction number associated with this word.
R5199 0      SCA_WRD_L_XTN  = SCA[75]%,      !Last transaction number associated with this word.
R5200 0      !...
R5201 0      SCA_WRD_LST_HYP = SCA[80]%,      !TRUE if word to end with a '-'.
R5202 0      SCA_WRD_HYP_PTR = SCA[81]%,      !If SCA_WRD_LST_HYP is TRUE,

```

```

R5203 0
R5204 0
R5205 0
R5206 0
R5207 0
R5208 0
R5209 0
R5210 0
R5211 0
R5212 0
R5213 0
R5214 0
R5215 0
R5216 0
R5217 0
R5218 0
R5219 0
R5220 0
R5221 0
R5222 0
R5223 0
R5224 0
R5225 0
R5226 0
R5227 0
R5228 0
R5229 0
R5230 0
R5231 0
R5232 0
R5233 0
R5234 0
R5235 0
R5236 0
R5237 0
R5238 0
R5239 0
R5240 0
R5241 0
R5242 0
R5243 0
R5244 0
R5245 0
R5246 0
R5247 0
R5248 0
R5249 0
R5250 0
R5251 0
R5252 0
R5253 0
R5254 0
R5255 0
R5256 0
R5257 0
R5258 0
R5259 0

```

SCA_WRD_LC_PNCT = SCA[82]%, !then a CHSPTR to the '-'.
 SCA_WRD_LST_SP = SCA[83]%, !TRUE if last character was end-of-sentence punctuation.
 SCA_WRD_LST_JUS = SCA[84]%, !Number of spaces after last word.
 SCA_WRD_LST_UND = SCA[85]%, !True if justification mark after last word.
 !True if last space was underlined.

LITERAL SCA_CASE_SIZE = 25, !Number of cells containing case information
 SCA_SIZE = 96; !Number of cells in entire SCA

LITERAL SCA_SAVE_START = 25, !Starting number of the SAVED SCA bits
 SCA_SAVE_END = 36; !Ending

!NOTE*** For all fields having to do with underlining, bolding, etc, see ENDCHR, ENDWRD, OUTLIN, and DOFLG
 ! to see how these fields get manipulated.

!The bits defined by these macros get set to TRUE if SCANT is supposed
 !to BOLD and/or UNDERline all characters it encounters. These bits get
 !set/unset by things like ^& and \&, and .ENABLE/.DISABLE BOLDING, etc.

MACRO
 SCA_BLD = (SCA_NBITS)<BLD_-->%,
 SCA_UND = (SCA_NBITS)<UND_-->%,
 SCA_BLDUND = (SCA_NBITS)<BLDOND_-->%; ! Bolding and underlining
 ! as a set.

!The bits defined by these macros determine whether or not various flags
 !have any effect. TRUE means that the corresponding function should be
 !done when the flag is recognized, FALSE not.
 !These bits get set/cleared by commands such as .ENABLE/.DISABLE BOLDING,
 !and so on. See FLGSEM, which sets these flags.
 !There is a difference between SCA_XXX and SCA_DO_XXX. The former
 !indicates whether or not the XXX type of emphasis has been turned on
 !by a construct such as ^&. The latter indicates whether or not the
 !emphasis called for by XXX should really be done. In particular,
 !consider the following sequence:
 !00100 .ENABLE UNDERLINING;^&
 !00200 This text will be underlined because both .ENABLE UNDERLINING and ^&
 !00300 were specified. But
 !00400 .DISABLE UNDERLINING;this text (after the ";") will not be underlined
 !00500 because the .DISABLE UNDERLINING command indicates it should not be
 !00600 done. Or, perhaps more interesting is the fact that even
 !00700 &t&h&e&s&e &t&w&o &w&o&r&d&s will not be underlined whereas
 !00800 .ENABLE UNDERLINING;these two words& will be underlined, but nothing
 !00900 after the _\& sequence.

MACRO
 SCA_DO_BLD = (SCA_DO_NBITS)<BLD_-->%,
 SCA_DO_UND = (SCA_DO_NBITS)<UND_-->%,
 SCA_DO_BLDUND = (SCA_DO_NBITS)<BLDOND_-->%; !Bolding and underlining as a set.
 SCA_DO_OVR = (SCA_DO_NBITS)<OVR_-->%,
 SCA_DO_IND = (SCA_DO_NBITS)<IND_-->%,
 SCA_DO_HYP = (SCA_DO_NBITS)<HYP_-->%;

MACRO
 ! The fields defined here are accumulated for an entire word.
 ! They get cleared at the start of a new word.

```

R5260 0      SCA_WRD_BLD      = (SCA_WRD_NBITS)<BLD-->%,
R5261 0      SCA_WRD_UND      = (SCA_WRD_NBITS)<UND-->%,
R5262 0      SCA_WRD_BLDUND    = (SCA_WRD_NBITS)<BLDUND-->%, !Bolding and underlining as a set
R5263 0      SCA_WRD_OVR      = (SCA_WRD_NBITS)<OVR-->%;
R5264 0
R5265 0      MACRO
R5266 0      ! The fields defined here get set just before a new character
R5267 0      ! is picked up. They are inherited from the global environment
R5268 0      ! in effect at that time.
R5269 0
R5270 0      SCA_WRD_C_BLD      = (SCA_WRD_CNBITS)<BLD-->%,
R5271 0      SCA_WRD_C_UND      = (SCA_WRD_CNBITS)<UND-->%,
R5272 0      SCA_WRD_C_BLDUN    = (SCA_WRD_CNBITS)<BLDUND-->%, !Bolding and underlining as a set
R5273 0      SCA_WRD_C_OVR      = (SCA_WRD_CNBITS)<OVR-->%;
R5274 0
R5275 0      MACRO
R5276 0      ! The fields defined here get set as various functions are
R5277 0      ! requested, on a once-only basis (e.g., single character underline, &x). These fields, together with
R5278 0      ! the previous three fields, determine what functions have been
R5279 0      ! requested for a specific character.
R5280 0
R5281 0      SCA_WRD_AC_BLD      = (SCA_WRD_ACNBITS)<BLD-->%,
R5282 0      SCA_WRD_AC_UND      = (SCA_WRD_ACNBITS)<UND-->%,
R5283 0      SCA_WRD_AC_BLDUN    = (SCA_WRD_ACNBITS)<BLDUND-->%, !Bolding and underlining as a set
R5284 0      SCA_WRD_AC_OVR      = (SCA_WRD_ACNBITS)<OVR-->%;
R5285 0
R5286 0      MACRO
R5287 0      SCA_DEFINITION =
R5288 0      VECTOR[SCA_SIZE]%;
R5289 0
R5290 0      $FIELD H_R_SCA_FIELDS =
R5291 0      SET
R5292 0      H_R_$G_SCA_JUSTIFY      = [$INTEGER],
R5293 0      H_R_$G_SCA_FILL        = [$INTEGER],
R5294 0      H_R_$G_SCA_CC_OK      = [$INTEGER],
R5295 0      H_R_$G_SCA_CROCK      = [$INTEGER],
R5296 0      H_R_$G_SCA_LM        = [$INTEGER],
R5297 0      H_R_$G_SCA_RM        = [$INTEGER],
R5298 0      H_R_$G_SCA_SPACING    = [$INTEGER],
R5299 0      H_R_$G_SCA_PERIOD      = [$INTEGER],
R5300 0      H_R_$G_SCA_KER        = [$INTEGER],
R5301 0      H_R_$G_SCA_BAR_CHAR    = [$INTEGER],
R5302 0      H_R_$G_SCA_AUTOTITLE  = [$INTEGER],
R5303 0      H_R_$G_SCA_FLAGS      = [$INTEGER],
R5304 0      TES;
R5305 0
R5306 0      LITERAL
R5307 0      H_R_SCASK_LENGTH = $FIELD_SET_SIZE;
R5308 0
R5309 0      LITERAL
R5310 0      MAX_H_R_SCA = 3; !This means there are a maximum of 3 concurrent PUSH_SCAs.
R5311 0      MACRO
R5312 0      $H_R_SCA_BLOCK =
R5313 0      BLOCK [H_R_SCASK_LENGTH] FIELD (H_R_SCA_FIELDS) %;
R5314 0
R5315 0      MACRO
R5316 0      PUSH_SCA =

```

```

MR5317 0
MR5318 0
MR5319 0
MR5320 0
MR5321 0
MR5322 0
MR5323 0
MR5324 0
MR5325 0
MR5326 0
MR5327 0
MR5328 0
MR5329 0
MR5330 0
MR5331 0
MR5332 0
MR5333 0
MR5334 0
MR5335 0
MR5336 0
MR5337 0
MR5338 0
MR5339 0
MR5340 0
MR5341 0
MR5342 0
MR5343 0
MR5344 0
MR5345 0
MR5346 0
MR5347 0
MR5348 0
MR5349 0

      BEGIN
      PP_SCA [ H_R_$G_SCA_JUSTIFY ] = .SCA_JUSTIFY;
      PP_SCA [ H_R_$G_SCA_FILL ] = .SCA_FILL;
      PP_SCA [ H_R_$G_SCA_CC_OK ] = .SCA_CC_OK;
      PP_SCA [ H_R_$G_SCA_CLOCK ] = .SCA_CLOCK;
      PP_SCA [ H_R_$G_SCA_LM ] = .SCA_LM;
      PP_SCA [ H_R_$G_SCA_RM ] = .SCA_RM;
      PP_SCA [ H_R_$G_SCA_SPACING ] = .SCA_SPACING;
      PP_SCA [ H_R_$G_SCA_PERIOD ] = .SCA_PERIOD;
      PP_SCA [ H_R_$G_SCA_KER ] = .SCA_KER;
      PP_SCA [ H_R_$G_SCA_BAR_CHAR ] = .SCA_BAR_CHAR;
      PP_SCA [ H_R_$G_SCA_AUTOTITLE ] = .SCA_AUTOTITLE;
      PP_SCA [ H_R_$G_SCA_FLAGS ] = .SCA_FLAGS;
      END
      &:

MACRO
POP_SCA =
      BEGIN
      SCA_JUSTIFY = .PP_SCA [ H_R_$G_SCA_JUSTIFY ];
      SCA_FILL = .PP_SCA [ H_R_$G_SCA_FILL ];
      SCA_CC_OK = .PP_SCA [ H_R_$G_SCA_CC_OK ];
      SCA_CLOCK = .PP_SCA [ H_R_$G_SCA_CLOCK ];
      SCA_LM = .PP_SCA [ H_R_$G_SCA_LM ];
      SCA_RM = .PP_SCA [ H_R_$G_SCA_RM ];
      SCA_SPACING = .PP_SCA [ H_R_$G_SCA_SPACING ];
      SCA_PERIOD = .PP_SCA [ H_R_$G_SCA_PERIOD ];
      SCA_KER = .PP_SCA [ H_R_$G_SCA_KER ];
      SCA_BAR_CHAR = .PP_SCA [ H_R_$G_SCA_BAR_CHAR ];
      SCA_AUTOTITLE = .PP_SCA [ H_R_$G_SCA_AUTOTITLE ];
      SCA_FLAGS = .PP_SCA [ H_R_$G_SCA_FLAGS ];
      END
      &:

```

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

H 12
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 185
(2)

; 5350 0 REQUIRE 'REQ:SETCAS.REQ'; ! Case control literals

Version: 'V04-000'

*
* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
* DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
* ALL RIGHTS RESERVED.
*

* THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
* ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
* INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
* COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
* OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
* TRANSFERRED.
*

* THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
* AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
* CORPORATION.
*

* DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
* SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*

++
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
Mnemonics for forcing letters into appropriate case.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

002 KAD00002 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.

--
LITERAL

force_lower =	-1,	!Force letters to lower case.
leave_case =	0,	!Leave letters in same case as input.
force_upper =	1,	!Force letters to upper case.
first_caps =	2,	!First letter of each word to upper case, the rest to !case implied by UPPER/LOWER CASE.
one_cap =	3;	!First letter of first word to upper case, the rest to lower.

LITERAL

setcase_low =	-1,	!Lowest numbered translation rule.
---------------	-----	------------------------------------

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

J 12
15-Sep-1984 23:07:40
15-Sep-1984 22:54:33

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]SETCAS.REQ;1 Page 187
(1)

: R5408 0 setcase_high= 3; !Highest numbered translation rule.
: R5409 0
: R5410 0 !
 End of SETCAS.REQ

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

K 12
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 188
(2)

; 5411 0 REQUIRE 'REQ:TOCRTY.REQ'; ! TOC record type definitions (MAJ_ & MIN_)

Version: 'V04-000'

*
* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
* DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
* ALL RIGHTS RESERVED.
*
* THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
* ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
* INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
* COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
* OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
* TRANSFERRED.
*
* THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
* AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
* CORPORATION.
*
* DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
* SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.

++
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
Literals defining the record types found in a .BTC or .BRN file. Each
record is preceded by two words, containing the major record type
and the minor record type.

ENVIRONMENT: Transportable BLISS

AUTHOR: Keith Dawson

CREATION DATE: May 1982

MODIFIED BY:

007 KAD00007 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.

--
LITERAL
maj_new_toc = 1, !Major record types.
maj_runoff = 2, !New TOC starting (at start of each file)
maj_send = 3, !Record is something automatically output by DSR
maj_send_contents = 4, !Record is something specified by .SEND TOC
!Record is something specified by .SEND CONTENTS

!The following minor record types apply when the major record type is MAJ_RUNOFF.

```

R5469 0
R5470 00 LITERAL
R5471 00 min_hl_inf = 0, !Header level information
R5472 00 min_page = 1, !Page number
R5473 00 min_hl_txt = 2, !Header level text, numbered
R5474 00 min_chapt = 3, !Chapter title (BfC files only)
R5475 00 min_append = 4, !Appendix title (BTC files only)
R5476 00 min_index = 5, !Start the index.
R5477 00 !
R5478 00 min_hl_txt_u = 6, !Header level text, unnumbered
R5479 00 !
R5480 00 min_examp_inf = 7, !Example information
R5481 00 min_examp_txt = 8, !Example caption text, numbered
R5482 00 min_examp_txt_u = 9, !Example caption text, unnumbered
R5483 00 !
R5484 00 min_figur_inf = 10, !Figure information
R5485 00 min_figur_txt = 11, !Figure caption text, numbered
R5486 00 min_figur_txt_u = 12, !Figure caption text, unnumbered
R5487 00 !
R5488 00 min_table_inf = 13, !Table information
R5489 00 min_table_txt = 14, !Table caption text, numbered
R5490 00 min_table_txt_u = 15, !Table caption text, unnumbered
R5491 00 !
R5492 00 min_chapt_inf = 16, !Chapter information
R5493 00 min_chapt_txt = 17, !Chapter caption text, numbered
R5494 00 min_chapt_txt_u = 18, !Chapter caption text, unnumbered
R5495 00 !
R5496 00 min_append_inf = 19, !Appendix information
R5497 00 min_append_txt = 20, !Appendix caption text, numbered
R5498 00 min_append_txt_u = 21, !Appendix caption text, unnumbered
R5499 00 LITERAL
R5500 00 min_min_type = 0, !The minimum minor record type.
R5501 00 min_max_type = 21, !The maximum minor record type.
R5502 00
R5503 00 !
R5504 00 SEND CONTENTS record group literals.
R5505 00
R5506 00 LITERAL
R5507 00 scon_comm = 1, !Send Contents text is a command
R5508 00 scon_txt = 2, !Send Contents text is text, numbered
R5509 00 scon_txt_u = 3, !Send Contents text is text, unnumbered
R5510 00
R5511 00 !
R5512 00 SEND CONTENTS positioning information.
R5513 00
R5514 00 LITERAL
R5515 00 scon_lev = 1, !Put Send Contents in main part of CONTENTS
R5516 00 scon_exa = 2, !Put Send Contents in Examples portion
R5517 00 scon_fig = 3, !Put Send Contents in Figures portion
R5518 00 scon_tab = 4, !Put Send Contents in Tables portion
R5519 00
R5520 00 !
                                End of TOCRTY.REQ

```

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

N 12
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 191
(2)

```

: 5521 0
: U 5522 0 %IF DSRPLUS %THEN
: U 5523 0 REQUIRE 'REQ:TNFDEFS.REQ'; ! TN... opcodes and status values for TNFIL
: U 5524 0 REQUIRE 'REQ:TNREC.REQ'; ! TNREC... items (for topnote record headers)
: U 5525 0 REQUIRE 'REQ:TOPNOT.REQ'; ! Topnote control table
: 5526 0 %FI
: 5527 0
: 5528 0 REQUIRE 'REQ:TPROB.REQ'; ! Completion codes returned by TPROBE routine
```

DS

Version: 'V04-000'

*
* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
* DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
* ALL RIGHTS RESERVED.
*

* THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
* ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
* INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
* COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
* OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
* TRANSFERRED.
*

* THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
* AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
* CORPORATION.
*

* DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
* SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*

++
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS
ABSTRACT:
Condition codes returned by the routine TPROBE in its binary search.
ENVIRONMENT: Transportable BLISS
AUTHOR: Rich Friday
CREATION DATE: 1978
MODIFIED BY:
002 KAD00002 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.
--

LITERAL
give_up = 0, ! Keyword cannot possibly be in list.
found = 1, ! This entry is the one you want.
try_above = 2, ! Keyword has to be above this entry.
try_below = 3, ! Keyword has to be below this entry.

End of TPROB.REQ

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

C 13
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_S255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1
Page 193
(2)

; 5583 0 REQUIPE 'REQ:TSF.REQ'; ! TSF_ (Text so far) macro definitions

DS

Th
ME

R5584 0
R5585 0
R5586 0
R5587 0
R5588 0
R5589 0
R5590 0
R5591 0
R5592 0
R5593 0
R5594 0
R5595 0
R5596 0
R5597 0
R5598 0
R5599 0
R5600 0
R5601 0
R5602 0
R5603 0
R5604 0
R5605 0
R5606 0
R5607 0
R5608 0
R5609 0
R5610 0
R5611 0
R5612 0
R5613 0
R5614 0
R5615 0
R5616 0
R5617 0
R5618 0
R5619 0
R5620 0
R5621 0
R5622 0

Version: 'V04-000'

*
* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
* DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
* ALL RIGHTS RESERVED.
*

* THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
* ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
* INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
* COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
* OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
* TRANSFERRED.
*

* THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
* AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
* CORPORATION.
*

* DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
* SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*

++
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
Definitions defining TSF (text so far). The information describes
what is to happen to the line being built up.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

E 13
15-Sep-1984 23:07:40
15-Sep-1984 22:54:43

VAX-11 Bliss-32 V4.0-742
_S255SDUA28:[RUNOFF.SRC]TSF.REQ;1

Page 195
(2)

R5623 0
R5624 00
R5625 00
R5626 00
R5627 00
R5628 00
R5629 00
R5630 00
R5631 00
R5632 00
R5633 00
R5634 00
R5635 00
R5636 0

MODIFIED BY:

007 KFA00007 Ken Alden 30-Jun-1983
Added TSF_CREF_COUNT.
006 REM00006 Ray Marshall 1-June-1983
Added TSF_CREF_DATA.
005 KAD00005 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.

--

```

R5637 0 MACRO
MR5638 0   tsf_int_hl      = tsf [0]   !Number of characters, internal representation.
R5639 0   tsf_ext_hl      = tsf [1]   !Resulting number of print positions, external.
MR5640 0   tsf_ext_hl      = tsf [1]   !Resulting number of print positions, external.
R5641 0   tsf_ext_hl      = tsf [1]   !Resulting number of print positions, external.
MR5642 0   tsf_nbits      = tsf [2]   !Notes about underlining, etc.
R5643 0   tsf_nbits      = tsf [2]   !Notes about underlining, etc.
MR5644 0   tsf_footw      = tsf [3]   !The number of footnotes attached to this line.
R5645 0   tsf_footw      = tsf [3]   !The number of footnotes attached to this line.
MR5646 0   tsf_seqn_flag  = tsf [4]   !TRUE if ISEQN is an SDS style line number.
R5647 0   tsf_seqn_flag  = tsf [4]   !TRUE if ISEQN is an SDS style line number.
MR5648 0   tsf_index      = tsf [5]   !TRUE if this belongs in the index.
R5649 0   tsf_index      = tsf [5]   !TRUE if this belongs in the index.
MR5650 0   tsf_int_vl     = tsf [6]   !Number of characters representing carriage control.
R5651 0   tsf_int_vl     = tsf [6]   !Number of characters representing carriage control.
MR5652 0   tsf_bar_char   = tsf [7]   !The character to be used as the change bar.
R5653 0   tsf_bar_char   = tsf [7]   !The character to be used as the change bar.
MR5654 0   tsf_jus_cnt    = tsf [8]   !Number of justification marks.
R5655 0   tsf_jus_cnt    = tsf [8]   !Number of justification marks.
MR5656 0   tsf_justify    = tsf [9]   !True if the line is to be justified.
R5657 0   tsf_justify    = tsf [9]   !True if the line is to be justified.
MR5658 0   tsf_adjust     = tsf [10]  !Move text this number of positions right.
R5659 0   tsf_adjust     = tsf [10]  !Move text this number of positions right.
MR5660 0   tsf_btc        = tsf [11]  !TRUE if this goes to the .BTC file.
R5661 0   tsf_btc        = tsf [11]  !TRUE if this goes to the .BTC file.
MR5662 0   tsf_draft_flag = tsf [12]  !The draft flag for this line.
R5663 0   tsf_draft_flag = tsf [12]  !The draft flag for this line.
MR5664 0   tsf_lines      = tsf [13]  !If this record is part of a footnote, the number of lines it generates.
R5665 0   tsf_lines      = tsf [13]  !If this record is part of a footnote, the number of lines it generates.
MR5666 0   tsf_first_xtn  = tsf [14]  !First transaction number associated with this text.
R5667 0   tsf_first_xtn  = tsf [14]  !First transaction number associated with this text.
MR5668 0   tsf_major      = tsf [14]  !If TSF_BTC is true, the major record type.
R5669 0   tsf_major      = tsf [14]  !If TSF_BTC is true, the major record type.
MR5670 0   tsf_last_xtn   = tsf [15]  !Last transaction number associated with this text.
R5671 0   tsf_last_xtn   = tsf [15]  !Last transaction number associated with this text.
MR5672 0   tsf_minor      = tsf [15]  !If TSF_BTC is true, the minor record type.
R5673 0   tsf_minor      = tsf [15]  !If TSF_BTC is true, the minor record type.
MR5674 0   tsf_padding    = tsf [16]  !Number of spaces needed to justify line.
R5675 0   tsf_padding    = tsf [16]  !Number of spaces needed to justify line.
MR5676 0   tsf_iseq       = tsf [17]  !TRUE if the input sequence number is wanted.
R5677 0   tsf_iseq       = tsf [17]  !TRUE if the input sequence number is wanted.
MR5678 0   tsf_iseqn      = tsf [18]  !The input sequence number for this line.
R5679 0   tsf_iseqn      = tsf [18]  !The input sequence number for this line.
MR5680 0   tsf_ipagen     = tsf [19]  !The input page number for this line.
R5681 0   tsf_ipagen     = tsf [19]  !The input page number for this line.
MR5682 0   tsf_filespec   = tsf [20]  !A CH$PTR to the file-spec.
R5683 0   tsf_filespec   = tsf [20]  !A CH$PTR to the file-spec.
MR5684 0   tsf_oseq       = tsf [21]  !TRUE if the output sequence number is wanted.
R5685 0   tsf_oseq       = tsf [21]  !TRUE if the output sequence number is wanted.
MR5686 0   tsf_oseqn      = tsf [22]  !The output line number for this line
R5687 0   tsf_oseqn      = tsf [22]  !The output line number for this line
MR5688 0   tsf_bold_depth = tsf [23]  !Number of times bolded characters should be overstruck. Zero is
MR5689 0   tsf_bold_depth = tsf [23]  !equivalent to no bolding.
R5690 0   tsf_bold_depth = tsf [23]  !equivalent to no bolding.
MR5691 0   tsf_text       = tsf [24]  !True, if TSF contains some text.
R5692 0   tsf_text       = tsf [24]  !True, if TSF contains some text.
MR5693 0   tsf_just_alg   = tsf [25]  !Justification algorithm to be used on this line.

```

```

R5694 0      %
MR5695 0      tsf_xyplus      = tsf [26]  !True if this line is an XPLUS/YPLUS indexing command.
R5696 0      %
MR5697 0      tsf_cref_data    = tsf [27]  ! Pointer to linked list of CREF BRN records.
R5698 0      %
MR5699 0      tsf_cref_count    = (tsf [28])<0,8>  !Number of pending crefs.
R5700 0      %
R5701 0      !! tsf_free_cell    = tsf [29]  !Free cell
R5702 0      %
R5703 0      !! tsf_free_cell    = tsf [30]  !Free cell
R5704 0      %
MR5705 0      tsf_aux_bits      = tsf [31]  !Do specified special functions.
R5706 0      %
MR5707 0      tsf_hBars         = (tsf [32])<BAR__> !TRUE if change bars apply to the items described by TSF_xxx_ML.
R5708 0      %
MR5709 0      tsf_aux_aloc      = tsf [33]  !How TSF_AUX_SPAC is allocated.
R5710 0      %
MR5711 0      tsf_next_reg      = tsf [34]  !Indicates next free 'pseudo-register.'
R5712 0      %
MR5713 0      tsf_phregs        = tsf [35]  !Five 'pseudo-registers'.
R5714 0      %
R5715 0      LITERAL
R5716 0      tsf_nregs          = 5;          !Number of 'pseudo-registers' available.
R5717 0      %
R5718 0      LITERAL
R5719 0      tsf_size           = 40;          !Total size of TSF.
R5720 0      %
R5721 0      MACRO
MR5722 0      tsf_bld            = (TSF_NBITS)<BLD__>
R5723 0      %
R5724 0      %
MR5725 0      tsf_und            = (TSF_NBITS)<UND__>
R5726 0      %
R5727 0      %
MR5728 0      tsf_ovr            = (TSF_NBITS)<OVR__>
R5729 0      %
R5730 0      %
R5731 0      MACRO
MR5732 0      tsf_bars           = (TSF_AUX_BITS)<BAR__> !True if change bars apply to the items described by TSF_xxx_VL.
R5733 0      %
R5734 0      %
R5735 0      MACRO
MR5736 0      tsf_definition     =
R5737 0      REF VECTOR [tsf_size]%;
R5738 0      %
R5739 0      !
                                End of TSF.REQ

```

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

H 13
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 B1-s-32 V4.0-742
_S255SDUALJ:[RUNOFF.SRC]DSRLIB.REQ;1 Page 198
(2)

: 5740 0 REQUIRE 'REQ:VR.REQ'; ! VR_... & VR*_DEF for .VR and conditionals

Version: 'V04-000'

*
* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
* DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
* ALL RIGHTS RESERVED.
*

* THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
* ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
* INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
* COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
* OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
* TRANSFERRED.
*

* THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
* AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
* CORPORATION.
*

* DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
* SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
*

++
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:
Tables and definitions used for .VARIABLE, .IF, .IFNOT, .ELSE, and
.ENDIF. The tables all contain space for an extra entry, so that various
other pieces of code need not continually check to see if there is an
entry in the tables.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

002 KAD00002 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idents,
copyright dates. Changed require files to BLISS library.

--
LITERAL

vr_table_count = 5, !Number of tables that are vectors.

vr_tab_size = !Total BPVALs needed to save this information.
!Space for tables that are vectors.
(max_vr_names + 1) * (vr_table_count)
+

```

: R5798 0      !Space for names.
: R5799 0      (max_vr_names + 1) * CH$ALLOCATION (max_vr_length);
: R5800 0
: R5801 0      MACRO
: MR5802 0      vrflg_def =
: MR5803 0      VECTOR [max_vr_names + 1]      ! TRUE flag.
: R5804 0      x,
: R5805 0
: MR5806 0      vrfflg_def =
: MR5807 0      VECTOR [max_vr_names + 1]      ! FALSE flags.
: R5808 0      x,
: R5809 0
: MR5810 0      vrbool_def =
: MR5811 0      VECTOR [max_vr_names + 1]      ! TRUE/FALSE setting.
: R5812 0      x,
: R5813 0
: MR5814 0      vrsrc_def =
: MR5815 0      VECTOR [max_vr_names + 1]      ! How variable got defined.
: R5816 0      x,
: R5817 0      ! 0 means /VARIANT, 1 means .VARIABLE.
: MR5818 0      vrlng_def =
: MR5819 0      VECTOR [max_vr_names + 1]      ! Lengths of variable names.
: R5820 0      x,
: R5821 0
: MR5822 0      vrname_def =
: MR5823 0      BLOCKVECTOR [max_vr_names + 1
: MR5824 0      ,ch$allocation (max_vr_length)]
: R5825 0      x;
: R5826 0
: R5827 0      !
:                               End of VR.REQ

```

FLIPRECS -- FLIP/RUNOFF record formats
TOCHL -- HL indicator record

K 13
15-Sep-1984 23:07:40
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742
_\$255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 201
(2)

: 5828 0 !! REQUIRE 'REQ:XTINTAB.REQ'; ! In-core index table & entry definitions
: 5829 0 ! End of DSRLIB.REQ

Library Statistics

File	----- Total	Symbols Loaded	----- Percent	Pages Mapped	Processing Time
_\$255\$DUA28:[SYSLIB]XPORT.L32;1	590	41	6	252	00:00.2
_\$255\$DUA28:[RUNOFF.SRC]RNODEFDSR.L32;1	6	1	16	5	00:00.1

COMMAND QUALIFIERS

: BLISS/LIBRARY=SRC\$:/LIST=LISS\$ SRC\$:DSRLIB.REQ

: Run Time: 01:17.4
: Elapsed Time: 01:46.7
: Lines/CPU Min: 4520
: Lexemes/CPU-Min: 67306
: Memory Used: 284 pages
: Library Precompilation Complete

0339

DIGITAL EQUIPMENT CORPORATION
CONFIDENTIAL AND PROPRIETARY

0340

DIGITAL EQUIPMENT CORPORATION
CONFIDENTIAL AND PROPRIETARY